

Amendment 0001
Solicitation Number N00014-15-R-BA010
“Expeditionary Intelligence Surveillance, Reconnaissance Science and Technology”
Date Published: June 19, 2015

The purpose of Amendment 0001 is to respond to questions submitted in response to the BAA.

1. Programmatic

Question: If we have technology that we believe is applicable to multiple focus areas that are related, should we submit multiple Whitepapers, or combine them into a single one?

Answer: Offerors should submit a white paper for each focus area of interest.

2. Network statistics on rich graphs

Question: Are target graphs be assumed to only cover a single social media source, or are broader social networks whose links can span multiple modes of social interaction expected?

Answer: Consideration of broader networks are preferred.

Question: If graphs include the broader social networks, is entity resolution assumed to be handled prior to calculation of network statistics, or is performing entity resolution within the scope of the topic?

Answer: Either approach is responsive; however the performer should clearly state if the proposed method assumes graph pre-processing.

3. Actionable empirical models of factional dynamics

Question: Are there other specific predictive capabilities desired besides “comparing different courses of action intended to change edge strengths”?

Answer: The formation of new links or the severing of existing links between groups.

Question: What is the expected time-horizon for predictions?

Answer: This is dependent on questions considered and the method chosen.

4. Knowledge-based Workflow Management

Question: Can you clarify what is meant by the term “workflows that can be coded by ‘if-then’ statements are desired”? Is the If portion of the statement the alert condition, and the Then portion the workflow?

Answer: Yes, the alert condition is the “if” and the workflow is the “then”.

Question: What is the delineation between a composed workflow and a fusion algorithm? Is the composed workflow expected to do similar actions to the other

development areas in the BAA (e.g., querying NoSQL data stores, Pattern of Life algorithms, fusion on graphs)?

Answer: A workflow is a combination of applications (such as fusion), data ingests and visualizations as required.

Question: Can you describe an example desired workflow that generates supporting/refuting information based on an alert condition?

Answer: A specific entity posts a comment that is hostile to an American value but further analysis does not establish any ties to any other at risk entity.

Question: To what degree are you viewing knowledge-based workflow management as an automated process, vs. a human-driven process? Is human interface and mixed-initiative updates of the workflow a big part of the objective of that thrust?

Answer: The choice between automated or mixed initiative is up to the performer since this choice is dependent of the level of confidence that can be established.

5. Advanced query capabilities against NoSQL data stores

Question: Would you be interested in novel human-to-machine interfaces (e.g., mobile, web, laptop), data visualizations, and collaboration technologies (e.g., chat and digital datalinks) that leverage the enabling capabilities to improve operational and tactical coordination? (This could conceivably be relevant to the workflow management as well)

Answer: A tie to the BAA scope would need to be argued.

6. Civil Information Exploitation

Question: We were wondering if there was a public data element to the civil information exploitation application? To what degree are you interested in solutions that incorporate crowdsourcing, and the potential differing capabilities of potential crowdsourcing contributors?

Answer: A proposal that leveraged crowd sourcing to enhance civil information exploitation would be considered responsive.

7. Transition

Question: What is the target integration environment for the enabling technologies/capabilities developed under this solicitation (e.g., TCRI, DCGS-N Inc 2)?

Answer: Naval intelligence and command and control programs of record.

Question: Is the focus here necessarily on "strategic" level planning, or might "operational" level planning do just as well? Can you give examples of the kind of officers (organization/role/rank) and planning problems (mission/setting/constraints) you have in mind?

Answer: Proposals that enhance decision making at any command level are responsive.

8. **Question:** Given the context of the rest of the BAA, is it the case that this focus area assumes that the "open source" "historical data" will be ingested (i.e., using information extraction technology) into some kind of structured knowledge store (e.g., a graph of RDF tuples tied to some ontology)? Put another way, is the solution being sought some kind of graph search, matching, inference, and/or learning mechanism that relates to the other focus areas? Or alternately, might a viable proposed approach focus on something more like text-based information retrieval and processing?

Answer: Analytic capabilities are sought.

9. **Question:** If this focus area presupposes information extraction (IE) into structured (graph) data, is the development of suitable IE technology part of this focus area or is such technology to be assumed?

Answer: Presupposes that existing IE technology exists that can produce graph data.

10. **Question:** If suitable IE technology is to be assumed, do you have (or are you aware of) any representative corpora of extracts that would serve as a testbed for the research project?

Answer: Depending of the scope of proposed work it is possible that the program office has a useful data holding.