

## **BAA 12-09: Advanced Bottled Liquid Scanner (BLS)**

### **Questions and Answers**

**Q:** I was hoping to find out if there is currently an incumbent contractor/contract number associated with the Advanced BLS (BAA1209) BAA. If not, is this a new requirement?

**A:** There is no incumbent. This is a new activity for Next Generation Checkpoint.

**Q:** The scope states that the system must be able to analyze multiple bottles contained in a zip-lock bag simultaneously, as well as individual containers. I would like to ask whether a system that can only scan individual containers would be acceptable, if the average time is only 1 second/container?

**A:** No.

**Q:** Ethanol: We would like to know the concentration of ethanol that is considered hazardous for the bottle screening process and whether it is expected that non-hazardous drinks containing ethanol are cleared.

**A:** The concentration of ethanol that is considered hazardous is 30 percent (or greater) alcohol by volume ethanol.

**Q:** Salt Water: What range of ionic solutions must the system detect and what concentration is considered hazardous? Salt water is mentioned – are there any other solutions to be considered? Is it expected that the systems singles out salt water from beverages such as vegetable juice?

**A:** Sodium chloride solutions (salt water, juices) are considered to be non-threat liquids. The detection technique should be able to identify solutions of hypochlorite, chlorate, perchlorate or similar ions.

**Q:** Limit of Detection: Is the minimum volume to be measured 25% of 30 ml (the smallest sized bottle listed) or 7.5 ml?

**A:** Information provided in Table 1.8.2, page 6, Maintain detection capability, second and third bullet are correct as stated. “On bottles filled at a minimum of 25% of their capacity” refers to the minimum fill of a bottle. “Volume” requirement sets the upper and lower amount of liquid for which detection capability must be maintained.

**Q:** Does the footprint refer to the main unit or do all the auxiliary electronics (power supplies, computer, and digital acquisition equipment), which could be placed under a table or desk, need to fit into this footprint as well?

**A:** The footprint requirement refers to the Bottled Liquid Scanner as a self-contained, stand-alone unit.

**Q:** Page 4&5, Table, Row 1: Automatically identify and distinguish explosives and flammable liquids: Will the system be tested only against these threat examples? Are there any definitions of compositions? If so, can we see the definitions?

**A:** The system will be tested against these and other threats. Specific composition definitions are classified.

**Q:** Page 4&5, Table, Row 1: Automatically identify and distinguish explosives and flammable liquids: Normally saline solutions for medical purposes are considered benign. What differentiates these and threat salt water?

**A:** Sodium chloride solutions (salt water, juices) are considered to be non-threat liquids. The detection technique should be able to identify solutions of hypochlorite, chlorate, perchlorate or similar ions.

**Q:** Page 4&5, Table, Row 1: Automatically identify and distinguish explosives and flammable liquids: What are the “specific categories” we need to put in the white paper?

**A:** Provide a sufficient number (preferably all) with supporting data to effectively describe and support the capability of your proposed approach.

**Q:** Page 4&5, Table, Row 1: Automatically identify and distinguish explosives and flammable liquids: What % detectivity [sic] constitutes alarming for a specific threat under “examples of threats for which the system will generate alarms”?

**A:** As stated in Section 1.8.2, page 5, Threshold column: “Offerors are required to submit: Proposed metrics for detection rate and false alarm rate.” The examples of threats described by the offeror should be those which generate alarms at their proposed metrics for detection rate and false alarm rate.

**Q:** Page 4&5, Table, Row 1: Automatically identify and distinguish explosives and flammable liquids: We are concerned that information on our proposed threat performance would be in an unclassified document. Are you comfortable with this scenario?

**A:** As specified in Section 7.1 and emphasized in section 1.8.2 (page 5), any response to this BAA is required to be unclassified.

**Q:** Page 4&5, Table, Row 1: Automatically identify and distinguish explosives and flammable liquids: “Probability of Detection” – how is this calculated?

**A:** As stated in Section 1.8.2, page 5, Threshold column: “Offerors are required to submit: Proposed metrics for detection rate and false alarm rate.”

**Q:** Page 4&5, Table, Row 1: Automatically identify and distinguish explosives and flammable liquids: Are we correct that for the White Paper we only need to declare categories and give examples, not giving info on specific threats or benigns?

**A:** It is the responsibility of the offeror to provide a full and responsive white paper in accordance with the BAA submission requirements stated in section 4.3.c., page 15.

**Q:** Page 4&5, Table, Row 1: Automatically identify and distinguish explosives and flammable liquids: Is the Probability of False Alarms per bottle, or per bag?

**A:** As stated in Section 1.8.2, page 5, Threshold column: “Offerors are required to submit: Proposed metrics for detection rate and false alarm rate.”

**Q:** Page 4&5, Table, Row 1: Automatically identify and distinguish explosives and flammable liquids: Is pure isopropanol or ethanol indeed considered a threat? Is so, is there a lower concentration that is considered benign, to distinguish liquor and perfumes?

**A:** The concentration of ethanol that is considered hazardous is 30 percent (or greater) alcohol by volume ethanol.

**Q:** Page 5, Row 2: Detect contents within sealed containers: Is there a requirement for scanning Tetra-Pak style cardboard containers?

**A:** Yes. The SOW will be revised to include cardboard/paper containers.

**Q:** Page 5, Row 2: Detect contents within sealed containers: Can you list the metals for container types?

**A:** No. Assume typical stream-of-commerce metal container compositions.

**Q:** Page 5, Row 2: Detect contents within sealed containers: Are there any limits to the wall thickness of the bottles?

**A:** No.

**Q:** Page 5, Row 2: Detect contents within sealed containers: Since glass covers a broad category of materials, what particular glasses are to be scanned?

**A:** All types.

**Q:** Page 6, Row 1: Maintain detection capability: Is the 30 ml minimum the liquid volume or the bottle volume?

**A:** Liquid volume.

**Q:** Page 6, Row 2: Maintain detection capability during collective analysis of liquids contained within a zip-top bag: If there is a threat found in a bag, do we have to identify which bottle it is?

**A:** Yes.

**Q:** Page 6, Row 2: Maintain detection capability during collective analysis of liquids contained within a zip-top bag: Does opening the Zip-top bags mean the bottles can be taken out of the bag?

**A:** Bottles are not intended to be removed from the zip-top bag. Opening the bag is intended to facilitate single layering of the zip-top bag contents.

**Q:** Page 6, Row 3: Sample processing time: For the average time calculation, what ratio of single bottles to quart/gallon bags is used?

**A:** No ratio is used.

**Q:** Page 6, Row 3: Sample processing time: Does “identify threat composition” mean what category is the threat or what are chemical constituents?

**A:** The requirement is to identify the category of threat and threat constituent(s).

**Q:** Page 6, Row 3: Sample processing time: Does threat identification need to be achieved in the 20 s for the Objective?

**A:** Yes.

**Q:** Page 6, Row 4: Alarm clear down time: Can the Alarm Clean [sic] Down time be used to identify which item in the bag has produced the alarm (if this is required) and/or identify the correct composition?

**A:** No. Threshold time requirement for threat/non-threat indication is not to exceed 20 seconds and specific identification is not to exceed 60 seconds. Objective requirement is not to exceed 20 seconds for identification.

**Q:** Page 6, Row 5: Notification capability: Are strong alcohols or perfumes classed as flammable?

**A:** Yes.

**Q:** Page 6, Row 6: System Footprint (width x depth): Will systems outside the Threshold footprint be considered if particular levels of performance are achieved?

**A:** No.

**Q:** Page 6, Row 6: System Footprint (width x depth): Can the prototypes be larger than the Threshold footprint?

**A:** No.

**Q:** Page 7, Row 1: Estimated cost for a production run of 1000 units: Is this the estimated production cost or the estimated sale price?

**A:** The offeror should specify whether the estimate is cost or price.

**Q:** Page 12. Section 2.1: Available Amount of funding: Should we assume that the \$3M available funding applies to only Task 1 (1.8.2.1) or to Task 1 and Optional Task 2 (1.8.2.2) together?

**A:** The \$3 million available funding applies to Task 1 and Optional Task 2 and is the total amount available for all potential contract awards.