DHS SBIR-2012.1 Question and Answer Matrix

As of December 29, 2011

ID #	Date Answere	Topic Area	Question	Answer
1	11.22.2011	12.1-001	Should the tunnel be continuously enclosed or can sections be open to the environment?	The objective is to minimize aerosol transmission of microorganisms.
2	11.22.2011	12.1-001	Will water be available onsite or should it be supplied with the unit?	Assume water will be available from well, hydrant, municipality or tanker, however, the tunnel unit should have compatible fittings.
3	11.22.2011	12.1-001	Will a power source be available onsite or should it be supplied with the unit?	Assume the tunnel unit will be capable of connecting to a generator or generating its own power.
4	11.22.2011	General	The Phase I Option Cost proposal (not to exceed $50,000) is or is not included in the Technical Proposal portion of the document?	The cost proposal for the Phase I option must be included in the Technical Proposal (if an option is proposed and discussed in the Technical Proposal). The cost proposal for the option does not count against the Technical Proposal page limit.
5	11.22.2011	General	The Phase I Main cost proposal (not to exceed $100,000) is or is not included in the Technical Proposal portion of the document?	The Phase I cost proposal counts as 1 page towards the proposal page count no matter how it prints out. The cost proposal for the base effort (not to exceed $100,000) is entered separately via the SBIR portal when the proposal is submitted.
6	11.22.2011	12.1-005	What is an average size of the security perimeter? For example is it an open market place that can be the size of a football field or larger? Or is it more like a small hallway?	There is no size specified for this individual SBIR topic. It is, however, desirable for Phase I that the offeror propose a solution that addresses a security perimeter similar to a covered spectator concourse at a sports venue or passenger concourse at a mid-sized airport terminal.
7	11.22.2011	12.1-005	Are the security perimeters strictly indoor or strictly outdoor, or are you looking for solutions for both indoor and outdoor?	While a solution that addresses both environments is optimal, a solution that addresses the ability to track an individual in an indoor environment is permissible for Phase I. It is anticipated that the most successful proposals will define a clear path from Phase I to Phase III of this SBIR topic that indicates measureable progress toward tracking persons in both indoor and outdoor environments.
8	12.09.2011	12.1-005, General	Can a C corporation with a MWBE and a HUB designation and the owner have more than 51% of the company shares is eligible to submit a proposal for this solicitation?	The SBIR Policy Directive defines an eligible corporation as one that is: (i) at least 51 percent owned and controlled by one or more individuals who are citizens of the United States or permanent resident aliens in the United States; (ii) at least 51% owned and controlled by another business concern that is itself at least 51% owned and controlled by individuals who are citizens of, or permanent resident aliens in the United States; or (iii) a joint venture in which each entity to the venture must meet the requirements of either (i) or (ii). The designations MWBE and HUB do not factor into the definition of corporate ownership. Subject to the above, your company as a C Corp would be eligible to submit.
9	12.09.2011	12.1-005	Does excluding the use of RFID include other radio driven technologies and protocols such as bluetooth, zeegbee, inferred or UHF sensor technologies or just the specific protocols for 433 and 915 MHz RFID protocols technologies?	There is no intent to prohibit any particular technical approach to the solution of the requirement presented in this topic. This prohibition was placed in the topic to emphasize to any potential offeror that any solution proposed must provide a means of tracking persons who are not necessarily cooperating in their own tracking. This means that a solution to track persons within a secure perimeter should not rely on the need for an individual to carry anything other than his/her own individual personal items.
10	12.09.2011	12.1-005	Is voice analysis considered a biometric technology?	The validity of voice analysis as a biometric is still much debated within the scientific community. However, any solution proposed by an offeror should be able to track a person within a secure perimeter without his/her cooperation. With respect to voice analysis in particular, the offeror should be able to clearly articulate the merits of including any particular sensor or technique in its proposed solution when an obvious countermeasure; e.g., not talking, is apparent. Also, an offeror should consider the potential privacy implications resulting from incorporation of voice analysis in a proposed solution and how those implications would be mitigated.
11	12.09.2011	12.1-005, General	Regarding the review process mentioned in the solicitation, it states that the Phase I SBIR proposals will be evaluated on a competitive basis and will be considered to be binding for six (6) months from the date of closing of this Solicitation unless the proposer states otherwise. If selection has not been made prior to the proposal's expiration date, proposers may be asked to extend their proposal for an additional period of time. Additionally, the Timing of Phase I Awards indicates the following "the anticipated time between the date that this Solicitation closes and the award of the Phase I contract is approximately four (4) months. Phase I award information is posted on the website generally four (4) month after the close of the solicitation." Based on this information, would May 5, 2012 be an appropriate start date for the performance period?	The proposed date submitted by the offeror is only an approximate date. Historically, the DHS SBIR program has made awards in approximately 120 days from the closing date of the solicitation. It would not be appropriate to assume that the specific date stated in the question, even if approximate, is the exact date that the project will start. Start dates will be determined by the Contracts Officer.
12	12.09.2011	General	With regard to Section 3.7 Prior Awards Addendum on page 22 of the solicitation, I am not sure for some of the items listed if it should be with regard to a Phase I or a Phase II award. For instance the Phase I funding agreement number and Phase I Award amount are mentioned and I am wondering if this is really the Phase II funding agreement number and award amount. Could you tell us exactly what we should include in this addendum and for what phase each of these items is needed?	If your company has received more than 15 Phase II awards in the prior five fiscal years provide the following: • Name of the awarding agency • Date of Phase I and Phase II awards • Phase I and II funding agreement numbers (i.e., Contract Number) • Phase I & Phase II award amounts • Phase I topic title • Commercialization status for each prior Phase II award
13	12.16.2011	General	If we are including an option on a proposal, is the option budget to be included as an additional page on the technical proposal upload, though it will not be counted toward the page limitation?	Yes, the option budget is to be included as an additional page on the technical proposal upload, though it will not be counted toward the page limitation.
14	12.16.2011	General	How much funding can a company get for Phase I Option?	Per the solicitation, "The option should not exceed $50,000 and four (4) months."
15	12.16.2011	General	Do I include the Phase I Option budget in the phase I budget (in the same form?)?	The Phase I costs for the base effort (up to $100,000) and the costs for the Phase I option (up to $50,000) must be shown separately. Prepare the cost proposal for the base effort via the online submission system. Include the cost proposal for the option as part of the Phase I technical proposal. The cost proposal for the Phase I option is not included in the page count.
16	12.16.2011	General	What kind of work is accepted in Phase I Option? Are analysis and simulation acceptable in this case? Does it require a separate interim report?	Section 3.5.b.(11) describes acceptable work for the option. Deliverables, including monthly and other reports, will be listed in the contracts. It should be expected that monthly/interim reports will be due for each month of contract activity (see section 5.3 of the solicitation).
17	12.16.2011	12.1-005	The RFP states: "At the end of Phase I, it is desired that the performer be able to show that the proposed technology is feasible, low-cost, networkable – potentially in a distributed array – and is safe for use on humans. This may require the use of preexisting, commercial-off-the-shelf items that have been previously demonstrated or otherwise certified to be safe for use on human subjects." a. If a COTS solution previously demonstrated or otherwise certified to be safe for use on humans is proposed but is modified, does it necessarily require re-demonstration or recertification for human safety? b. If a non-COTS solution but similar in signal intensity to common consumer electronics is proposed, does it necessarily require demonstration or certification for human safety? c. What would cause something to need to be certified? d. What process does DHS recognize as meeting the criteria for "previously demonstrated or otherwise certified to be safe for use on human subjects" for 1.) modified COTS and for 2.) non-COTS? e. Is it acceptable for the monitored persons to given/wear a device for tracking and non-personal identification?	a. Yes b. Yes c. A device must be certified as safe for use on humans if there is a recognized and documented potential for harm to humans subjects resulting from its use. An example would be the use of lasers which could cause harm to humans if not certified as being "eye safe." Note that this example does not represent the Government's preferred solution to the SBIR topic and is included for illustration purposes only. d. One means recognized by DHS is the use of an independent and objective third-party certification organization, using recognized national or international standards, to accredit the offeror's proposed solution. It is incumbent upon the offeror to determine the best means of documenting to the Government that its proposed solution is safe for use on human subjects. e. No. The solution proposed must provide a means of tracking persons who are not necessarily cooperating in their own tracking. This means that a solution to track persons within a secure perimeter should not rely on the need for an individual to carry anything other than his/her own individual personal items.
18	12.16.2011	12.1-005	The RFP states: "It is also highly desirable that the capability be able to detect other cues potentially diagnostic of malintent; e.g., gait, remotely". Would a proposal concept where the core system had the following characteristics be of interest? a. Capable of locating and continuously tracking virtually unlimited numbers of individuals b. Capable of analyzing physical and behavioral traits of the tracked individuals or asset s(e.g., location, speed, past history, proximity to other tracked individuals or assets, etc.) c. NOT, in itself, capable of assessing "body language" characteristics such as "gait" but capable of interfacing to additional remote sensors such as video oriented sensors capable of gait, suspicious movements, and other body language assessments and performing data fusion to merge the data and to perform analysis on the combined data set.	There is no intent to prohibit or endorse any particular technical approach to the topic as long as the solution proposed by the offeror addresses topic requirements in their entirety.
19	12.16.2011	12.1-005	a. Is a network of high resolution video cameras a viable solution within your cost and operational constraints? Any privacy concern on using visual data, in addition to face recognition technique? Is the use of facial features strictly prohibited even when no personal information is tagged or stored with the features? b. Do you have any specific sensors in mind? Any direct relationship between this project and the Future Attributes Screening Technology (FAST) project at DHS? c. Are you interested on technologies that exploit existing deployed sensors or technologies based on new sensors? d. Is human operator intervention permissible during the tracking or does the system has to be completely autonomous? e. Does the program provide any datasets for performance evaluation? f. Do you want or have continuous coverage with the sensor network or is it possible to have gaps in the coverage? Also, are their areas of denied coverage in the area? g. We are assuming that the use case of the desired system is that the person of interest is tagged or nominated by the user and then he is tracked by the system from that point on. Is it correct? Or could the user also nominate a person from a recorded video of say 5 minutes ago and would want to know his/her location at the current time?	a. There is no intent to prohibit or endorse any particular technical approach to the topic as long as the solution proposed by the offeror addresses topic requirements in their entirety. There are potential privacy concerns regarding the use of visual data so any proposed solution intending to incorporate these features should address these concerns, as understood and articulated by the offeror, in their proposal and describe how those concerns would be addressed and/or mitigated. No, the use of facial features is not strictly prohibited. However, the offeror should not interpret this response as Government direction to implement any particular technical solution in its proposal. b. No; the Government does not have any specific sensors in mind. There is a potential connection to the FAST program. c. There is no intent to prohibit or endorse any particular technical approach to the topic as long as the solution proposed by the offeror addresses topic requirements in their entirety. d. Human intervention during tracking is permissible. e. This is yet to be determined. If the demonstration of a technical solution relies upon the use of Government-provided information (GFI), that should be explicitly stated by the offeror in its proposal. f. The objective of this topic is to develop an accurate, low-cost, reconfigurable capability that enables safe, continuous, high confidence tracking of persons within a security perimeter. If an individual within a secure cannot be continuously tracked; e.g., the subject has entered a restroom, the proposed solution must be able to reacquire the subject and confirm that the subject is the same person that entered the restroom. g. The goal is to ultimately provide a means to track each and every individual within a security perimeter without necessarily being tagged or nominated by a user to initiate the tracking process. As for the exclusion of tracking within restrooms, it would be desirable if a proposed solution demonstrates the means to quickly restart the tracking process when a subject returns to the public area within the security perimeter from the restroom.
20	12.16.2011	General	In the on-line Cost Proposal section, I do not see placeholder for "Phase I Option Cost". Are we supposed to enter Phase I Cost ONLY (i.e., 6 month <100k) in the section?	Yes. Also, the cost proposal for the Phase I option must be included in the Technical Proposal (if an option is proposed and discussed in the Technical Proposal). The cost proposal for the option does not count against the Technical Proposal page limit.
21	12.16.2011	General	I am currently working with a researcher from US Naval Research Laboratory under Department of Defense. Can Naval Research Laboratory be a subcontractor in Phase I and/or Phase II development?	See Section 1.5 of the Solicitation for a potential conflict of interest that may arise if the small business employs current or previous Government employees. In addition, Government wide SBIR policies restrict the use of any SBIR funds for the use of Government equipment and facilities. This does not preclude a small business from utilizing a Government facility or Government equipment, but any charges for such use may not be paid for with SBIR funds (Small Business Administration (SBA) Policy Directive, Section 9(f)(3)). DHS may not and cannot fund the use of the Federal facility or personnel for the SBIR project with non-SBIR funds. In rare and unique circumstances, SBA may issue a waiver to this provision after review of an agency's written justification. DHS cannot guarantee that a waiver from this policy can be obtained from SBA. See Sections 3.5.b (8) and (9) of the Solicitation for additional details.
22	12.29.2011	General	DHS Phase-I proposals are to be written for a six month base period and a four month option period. The Base period is limited to a maximum of $100,000 and the Option period is capped at $50,000. On the up-load page for Direct Labor there is a single line for: Labor Category, Hours, and Rates (the total is automatically calculated). Do we enter the base period and option period hours on one line or do we separate them into, for example: Senior Engineer (base period) Senior Engineer (option period)	Only the base period effort should be prepared via the online submission system. The option cost proposal is to be attached at the end of the technical proposal.
23	12.29.2011	12.1-005	a. Can a personal item be non-invasively tagged after initial identification as a person of interest? b. Is there a specific list of his/her individual personal items that DHS has an interest in? If so, what are the items on that list?	a. No; any solution proposed by the offeror must provide a means of tracking persons who are not necessarily cooperating in their own tracking. This means that a proposed solution to track persons within a secure perimeter should not rely on the need for an individual to carry anything other than his/her own individual personal items. b. No.
24	12.29.2011	General	Referencing the briefing chart, what is the meaning of the following: "Estimate TRL (1-9) at beginning and end of contract"? In the briefing chart quadrant labeled "Technical Objectives and Work Plan", is there a particular format for displaying this information?	In stating the following: "Estimate TRL (1-9) at beginning and end of contract", the solicitation is asking for a value to be placed on the progress of the project at the beginning and end of the Phase I effort. The link to the DHS Technology Readiness Level Calculator (ver 1.1, dated 30 September 2009) can be found at http://www.homelandsecurity.org/hsireports/DHS_ST_RL_Calculator_report20091020.pdf. In the briefing chart quadrant labeled "Technical Objectives and Work Plan", there is no particular format for displaying this information.
25	12.29.2011	12.1-005	Clarifications on terms in the Objective: "Develop an accurate, low-cost, reconfigurable capability that enables safe, continuous, high confidence tracking of persons within a security perimeter". a. -"Low-Cost": Are there any bounds for "Low-Cost" - Is there a target a per square foot cost? If so, what is that target? - Is there a target total cost for a given area? If so, what area? what cost? b. -"Reconfigurable": It is unclear what this term is in regards to - Does it mean that this tracking technology must capable of conforming to arbitrary physical area requirements (shape of area, ceiling heights, lighting, columns, chairs/benches, etc) - Is it reasonable to assume that this is an installed tracking system? - If not, what would be the frequency of physical relocation?	a. There are no bounds for "low-cost" except insofar that the solution proposed by the offeror should be affordable within the funding provided through an SBIR Phase I award. Historically, Phase I contracts have been awarded for approximately $100,000. This is not intended as a guarantee by the Government that Phase I awards, if any, will be made at this level under this solicitation and is offered for illustration purposes only. -No. Please see answer above. -No. Please see answer above. b. "Reconfigurable" means that the components comprising the system should be able to be moved periodically into different system configurations without adversely impacting the system's performance. It is reasonable to assume that the system or tracking technology must be able to conform to a variety of physical area requirements. If the offeror makes any assumptions regarding its interpretation of the term "reconfigurable," these should be explicitly stated in the response. -Yes, but the installation should be considered semi-permanent. -Frequency of physical relocation (reconfiguration) is yet to be determined.
26	12.29.2011	12.1-005	Extending upon the earlier posted question ID #7 regarding Indoor/Outdoor: - Is it sufficient for outdoor areas to be considered as normal flow paths, such as walkways and parking lots versus open fields?	No. However, any assumptions regarding the offeror's interpretation of normal indoor/outdoor flow paths should be explicitly stated in the response and these will be given due consideration by the Government during its evaluation process.
27	12.29.2011	12.1-005	In the Description, it states: "he or she is typically positively identified through a credential check only once at the entrance to a security perimeter.". A Tracking system would associate a unique tracking ID to each person in the area, but not initially have any correlating identity for that person -Is it correct to assume that, at the time of this credential check, the tracking system will receive checkpoint system ID and a time/location of the credential checkpoint so that these IDs can be correlated? -Is it correct to assume that a requirement/goal of this system is not to be able to do general identification of people via a global biometric database? -As per question ID #19, we understand that the system must be capable of re correlating tracking ID of people who, for example enter/exit a restroom or other area where they are transiently absent from a tracking session.	No. Per the topic, the Government requires "…that a capability be developed that enables the continuous tracking of individuals, without their active cooperation, in crowded environments so that cues detected through other remote sensors can be accurately and unambiguously assigned to specific persons being screened." It is not necessary to specifically identify an individual but rather, "…to be able to associate specific behavioral and physiological cues detected remotely through other means/with other sensors, and which may be potentially diagnostic of malintent (the intent to cause harm to our country or its citizens), with specific individuals with a very high degree of confidence and accuracy." -Yes. -Correct.
28	12.29.2011	12.1-005	Does simply gathering data by having a sample set of cooperating people walking through a lab tracing area trigger "Research Involving Human Subjects" as per 2.19 (DHS SBIR-2012.1)? - If so it is unclear whether an official policy must be in place at submission time?	It is the offeror's responsibility to make this determination. If human subjects research is necessary, an approved IRB must be in place before any federally funded research can begin. Contracts will be contingent on an approved IRB.
29	12.29.2011	12.1-005	Regarding " it will be necessary to be able to associate specific behavioral and physiological cues detected remotely through other means/with other sensors, and which may be potentially diagnostic of malintent. -Is the behavioral analysis, such as loitering or other suspicious movement meant to be part of this SBIR or is the information from this system to be integrated into other systems that would perform the behavioral analysis (such as the FAST)?	While there may be a potential connection to the Future Attribute Screening Technology (FAST) program, in Phase II of this topic the Government has stated that, "It is also highly desirable that the capability be able to detect other cues potentially diagnostic of malintent; e.g., gait, remotely." If there are other cues potentially diagnostic of malintent that an offeror's capability may be able to detect remotely, those should be explicitly stated in the offeror's proposal.
30	12.29.2011	General	Is there a maximum hourly rate for consultants?	Per the solicitation section 3.5b(9), "A minimum of two-thirds of the research and/or analytical work in Phase I, as measured by direct and indirect costs, must be carried out by the proposing small business concern". The cost proposal is assessed for cost reasonableness. Costs or rates that appear high or are out of the ordinary should be documented.
31	12.29.2011	12.1-006	This topic seems to involve at least a couple of aspects, including the "new and innovative sensing research" for prototype swarmbot sensors and then coupling of this to 'platforms/vehicles". Since this is a very broad problem potentially with many aspects, we were wondering what is the highest priority for DHS in this topic or how DHS would prioritize the different aspects of the overall problem in the context of SBIR? In other words, does the proposed project need to encompass the whole system (possibly requiring a larger team) or can the offeror focus on particular aspects of the problem specific to their expertise which can be linked to a system in Phase II?	The SBIR topic describes a small robotic system that will help with overall situational awareness during emergency response operations. The priority/interest is in a system to be architected in such a way that it will address the requirements identified in the solicitation rather than any single technology. The priority is in the overall system not just a single element/component. However, within the context of a proposed overall system, it is up to the proposers to make a case for focusing on one or more areas as key enablers for the entire system. Please also note that existing mature component technologies can be combined within the overall system as needed.
32	12.29.2011	12.1-006	Is this for an aerial vehicle, a ground based vehicle, miniature (smaller than the hand) or a generic system for any swarming and area coverage system? In other words, are you looking for a specific solution or a software one? Is this just for software or do you need a full hardware device as well? What are the Phase 1 objectives, i.e. what TRL is required at each phase?	This is for a generic system. We are looking for a "system" consisting of SW and HW that, as stated in the solicitation, will constitute a small robot capable of providing audio/video to improve situational awareness for emergency response operations Phase I is 6 months and proposers are encouraged to develop their proposed innovative system architecture and leverage mature technologies as needed to demonstrate their proposed capability. The goal is to establish a credible demonstrable architecture that will merit funding for Phase II to develop prototype system for tests and trials.
33	12.29.2011	12.1-001	Are the chemical contents and makeup of the disinfection solutions pre-determined based on the type of disease outbreak (by DHS or others), or is the identification of suitable solutions part of the Phase I effort? If the chemicals are pre-determined beyond those mentioned in the solicitation (bleach, etc.), could you provide that information at or before contract award?	The EPA has a list of registered antimicrobials for various pathogens (http://www.epa.gov/oppad001/chemregindex.htm). The pathogen will determine the potential disinfectants used.