

DHS SBIR-2015.1 Question and Answer Matrix

As of 1/14/2015

ID#	Date Answered	Topic Area	Question	Answer
1	1/14/2015	General	Will DHS provide a Microsoft Excel template for the DHS SBIR Cost Proposal with the seven different sections per page 13, section 3.4 of the solicitation?	No. Cost Proposals are to be submitted electronically using the DHS SBIR online proposal submission system. For additional information on the items in the Cost Proposal, and directions on completing the Cost Proposal, reference the DHS SBIR Cost Proposal Guide at https://sbir2.st.dhs.gov under "Reference Materials."
2	1/14/2015	General	The online form for Cost Proposal has Section A, for Direct Labor, and Section B for Overhead, but does not seem to have a Section for Fringe. We separate Fringe from Overhead. How should we include Fringe costs in our cost proposal?	Please add Fringe costs under Section C: Other Direct Costs (ODCs). Block F under Section C is an area for "Other" costs. Use Block G to explain the Fringe costs listed in Block F.
3	1/14/2015	H-SB015.1-002	Is the tamper proof to be a container for the bolt/seal, or a tamper proof bolt/seal itself?	It is to be a bolt/seal or other security device.
4	1/14/2015	H-SB015.1-002	What is the bolt/seal type and size?	The bolt/seal must be compatible with standard ISO cargo containers and standard truck/trailer doors.
5	1/14/2015	H-SB015.1-002	Is the tamper proof ability to render the bolt/seal inoperable, or just indicate the package (unit) has been tampered with?	Innovative research by the selected awardee(s) will determine this.
6	1/14/2015	H-SB015.1-002	What is the expected unit quantity?	Annually there are hundreds of millions of security devices used in cargo operations worldwide. The success of any one bolt/seal or locking devise is contingent upon many factors including cost and effectiveness.
7	1/14/2015	H-SB015.1-002	The solicitation uses the term "bolt seal", which I understand means that it provides a barrier to quick entry in addition to indication of tampering. Is this the intent, or is the term being used more generically to include indicative only seals?	The term bolt/seal is used generically to mean a tamper-proof barrier to prevent unlawful entry into a container, truck, trailer, etc. via the container/conveyance door(s).
8	1/14/2015	H-SB015.1-002	The solicitation mentions a target cost of \$15 per device. Does this mean a bill-of-materials cost, the full cost to manufacture, the price that it would be sold to the end customer, or the amortized cost to the customer per use (for a reusable device)?	\$15 is the targeted cost to the end user irrespective of the nature of the device or its use and implementation.
9	1/14/2015	H-SB015.1-002	Manufacturing costs can vary greatly on the volume of units being produced. What production quantities does the \$15 target imply?	Large production quantities of electronic bolt seals are not part of this project effort. The goal is to develop a system that meets the targeted cost of \$15 per unit that can then be commercialized at this cost.
10	1/14/2015	H-SB015.1-002	Other services may be needed for complete operation of the system, for example scanner system supply and maintenance, or data management. Income from these services could help offset the low device cost and make a viable business model. Are there constraints on any such services?	This is a research and development SBIR and income from services is not part of this effort.

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11	1/14/2015	H-SB015.1-002	Given the security interests, are there constraints on who can supply parts for the end product? For example, DHS might not want to have communications components from overseas suppliers for fear of compromised components.	So as not to hinder the development and implementation of a developmental device, it may include components from known and trustworthy international vendors. Single source overseas components should be avoided.
12	1/14/2015	H-SB015.1-002	When the solicitation states that the solution must not increase the time, effort, or workload on Customs and Border Protection or TSA Officers, is that in comparison to simple bolt seals, or to more sophisticated electronic seals or scanned identifiers that are already in use?	Because of the variety of seals currently in use, this development item should not levy a greater operational burden than that of the lowest common denominator, the use of simple bolt seal.
13	1/14/2015	H-SB015.1-005	<ul style="list-style-type: none"> • Does the unit incorporate Radio Communications? If so what frequencies and specifications (truncated, security protocols)? • Does the unit need the capability to link to LAN, WAN, or other computer networking system? • Does the unit need the capability to link via CAT5 hard line (or equivalent)? • Does the unit need the capability to provide a LAN? • Does the system need to relay any of the following: <ol style="list-style-type: none"> a. Phone Txt and/or pager info b. Email c. Broadcast emergency alerts d. Cell Phone access • What are the battery life requirements? • What are the environmental conditions requirements? (Ambient temperature (degF) max/min) (Water resistance: splash, immersion, depth) (Dust and dirt resistance) • What are the ruggedness requirements? (drop test, vibration, impact) • What computer operating system is preferred? (Android OS, MS Windows, Proprietary to system) • What security protocols are required? • Are any other data systems to be incorporated? 	The Department of Homeland Security (DHS), Office of Science and Technology (S&T) specifically did not provide requirements or exact specifications for a communications hub. These would have constrained, restricted the latitude and open nature of this announcement. Consider the first responder as a sensor; a sensor that works in concert with other first responders as part of a team – self-organizing/optimizing network. DHS S&T is seeking your expertise and innovative ideas on how we can best integrate sensors into responders' protective garments and standard equipment while making each responder a mobile, wireless communications hub.
14	1/14/2015	H-SB015.1-006	Will DHS consider a proposal that would utilized gamma energy instead of X-Ray as an imaging source to locate explosive materials and related bomb making devices?	Yes, we will consider.
15	1/14/2015	H-SB015.1-007	Is the unit to detect and transmit its GPS location or distance from the handlers unit?	The canine location information is required, information can be transmitted back to command center from handlers unit, this is left up to the offeror.

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16	1/14/2015	H-SB015.1-007	Does the unit need to have a communication capability from handler to canine?	No.
17	1/14/2015	H-SB015.1-007	Is there a requirement for minimum weight and/or size of the canine unit? Is there a requirement for minimum weight and/or size of the handler unit?	The unit has to be functional in the operating environment that was detailed in the solicitation for both the handler and the canine.
18	1/14/2015	H-SB015.1-007	What is the required minimum operating time related to batter life?	There is no prescribed minimum time, it is up to the offeror to state limits based on their design and understanding of operational scenarios listed in the solicitation.
19	1/14/2015	H-SB015.1-007	What are the operating condition requirements; ambient temperature (max/min), water resistance (splash, immersion, depth)?	The unit needs to be as robust as possible for the operational conditions of domestic law enforcement. Unit should be water resistant to withstand possible immersion, however unit is not meant for underwater use.
20	1/14/2015	H-SB015.1-008	Will the passenger be inside the vehicle during the inspection?	Yes, passengers may be inside the vehicle during inspection
21	1/14/2015	H-SB015.1-008	Do you require passive sensing or do you allow active sensing?	There is a restriction on use of external sources of ionizing radiation in the proposed system. Active sensing that does not utilize external sources of ionizing radiation is allowed.
22	1/14/2015	H-SB015.1-008	In regards to determining anomalous masses in POVs from 50-500 kg, esp. differentiating high Z materials for detecting heavily shielded SNMs, would DNDO consider a cross-cutting solution involving deployment of novel, lower cost radiation detectors which enable selective discrimination of signals from cosmic (e.g., high energy muon and to some extent neutron) particles interacting with low to high Z materials within POVs	A proposed solution that utilizes the incident cosmic ray and their ensuing interactions with mass anomalies to include low to high-z material is allowed, provided is able to discriminate those mass anomalies during typical screening operations in personally owned vehicles.
23	1/14/2015	H-SB015.1-008	What is considered "external sources of ionizing radiation"? Do these sources include terrestrial and celestial radiation?	External sources of ionizing radiation include intentionally constructed sources of ionizing radiation in which the amount of ionizing radiation and its associated radiation dose rate is rated above that caused by local terrestrial or cosmogenic sources of radiation. External sources of ionizing radiation include generators that create ionizing radiation such as generators and particle accelerators for the purpose of interrogating the personally-owned vehicles with ionizing radiation. Technological approaches that may leverage the nascent ionizing radiation from cosmogenic or terrestrial sources are acceptable.

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24	1/14/2015	H-SB015.1-008	The solicitation states that "The intended use of this technology is a sensor component within a larger threat detection system." What is the system referred to in this solicitation?	The intended system is a more comprehensive threat detection system that may also include radiation detectors as part of a multiple sensor threat system to include the proposed mass/shielding anomaly detection system. In order to provide flexibility and modularity in relation to a variety of concepts of operational deployment, the solicitation is focused on mass/shielding anomaly detection to either complement a system that may include a radiation detector, or augment existing systems that may have already mitigated the risk of unshielded ionizing radiation flux.
25	1/14/2015	H-SB015.1-008	The solicitation also states that "system may also include radiation detection." Can a proposal include custom radiation detection system that enhances the existing detectors?	The system may include radiation detection. Proposals requiring significant development of radiation detectors are outside the scope of the topic unless it can be demonstrated that those radiation detector modules are used for the purposes of detecting mass/shielding anomalies.
26	1/14/2015	H-SB015.1-008	What are the acceptable scan times?	There is no set "acceptability" with regard to scan times. The desired technological approach should align with existing scan times used in access control and inspection operations for personally-owned vehicles. Due to the variety of the operations that conduct access control or inspection operations, no single scan time is specified; however, technology that poses a significant operational burden in terms of increased inspection or scan times are discouraged.
27	1/14/2015	H-SB015.1-008	What are the operating condition requirements; ambient temperature (max/min), water resistance (splash, immersion, depth)?	The unit needs to be as robust as possible for the operational conditions of domestic law enforcement. Unit should be water resistant to withstand possible immersion, however unit is not meant for underwater use.
28	1/14/2015	H-SB015.1-008	Regarding research in algorithm and automated threat recognition (ATR), will DNDO provide images and/or data to a successful contractor under a scope of work for (offline) ATR development?	DNDO will not be providing images or data to Offerors or Awardees for SBIR topic 15.1-008.
29	1/14/2015	H-SB015.1-009	Should the module include any particular interface such as a wireless interface (Wi-Fi, Bluetooth) or traditional SPI, I2C, parallel interface?	The effort should focus on the detection, localization, identification aspects for neutrons or gammas. However, consideration should be given to accommodating communications in the future if this technology advances to that stage.
30	1/14/2015	H-SB015.1-009	Can you suggest potential partners for test and evaluation for the Neutron-based Modules?	The Government cannot suggest potential partners as this gives the appearance of an official endorsement. National labs often have resources for neutron testing. Also please refer to publications from conferences (e.g., IEEE, SORMA) in which companies have utilized their own neutron capabilities for testing