DEPARTMENT OF HOMELAND SECURITY
Science and Technology Directorate
WASHINGTON, D.C. 20220
09 August 2012

SUBJECT: Request for Information (RFI)

RFI# HSHQDC-12-R-00096

RFI for Screening Cargo for Human Stowaways

This RFI is issued solely for information and planning purposes; it does not constitute a Request for Proposal (RFP) or a promise to issue an RFP or Broad Agency Announcement (BAA). In addition, this RFI does not commit the Government to contract for any supply or service. Department of Homeland Security's (DHS') Science and Technology (S&T) is not at this time seeking proposals, nor do any specific plans for a solicitation exist at this time.

Responders are advised that the U. S. Government will not pay any cost incurred in the response to this RFI; all costs associated with responding to this RFI will be solely at the interested party's expense. Not responding to this RFI does not preclude participation in any future RFP or BAA. If a solicitation is released, it will be via the Federal Business Opportunities (http://www.fedbizopps.gov). It is the responsibility of the potential offerors to monitor this website for any information that may pertain to this RFI. The information provided in this RFI is subject to change and is not binding on the U. S. Government.

Background

DHS S&T is soliciting information on behalf of the Transportation Security Administration (TSA) regarding currently available Commercial-off-the-Shelf technology for screening cargo containers (e.g., unit load devices), "cookie sheets", crates, and boxes that are large enough to conceal a human stowaway. Vendors interested in submitting potential technology solutions that may be used to screen these configurations of cargo are asked to respond to this request. (Note: canines are not considered a technology for this RFI.)

Objective

DHS S&T conducts developmental test and evaluation services for the TSA and supports activities to place equipment on their Air Cargo Screening Technology List (ACSTL). In many cases, feasibility testing is conducted prior to actual qualification assessments. Once a technology is shown to be feasible, TSA will release a solicitation seeking whitepapers for cargo system qualification. The ultimate goal is to place new systems capable of detecting stowaways onto the ACSTL from which industry can select, purchase, and use.

Desired Capabilities

The TSA requires that all cargo containers, cookie sheets, crates, and boxes that weigh over 150 lbs be screened for human stowaways before they are placed on all cargo aircraft. To this end, technology solutions must be able to screen sealed containers made of various types of wood, plastic, metal, cardboard, and fiberglass. In addition, technologies must be able to screen

containers filled with any of the eight cargo commodities listed below:

- Electronics,
- Machine parts,
- Fish and meats,
- Fresh produce,
- Fresh flowers,
- Printed material,
- Wearing apparel, or
- Miscellaneous durable goods.

Since privatized screening companies bear the purchase cost and maintenance of the screening equipment, lifecycle costs are extremely important and must be minimized if technology solution providers expect to sell units. Further, screening solutions must be effective (i.e., a high probability of detecting a stowaway, while maintaining a low probability of false alarms) and must be efficient (i.e., able to screen containers in a short amount of time). The higher the screening throughput, the more desirable the system will be to companies.

RFI Submission Instructions

Responders are asked to submit "white papers" consisting of a 3 to 10 page response detailing the COTS technology. The responses must include Table 1 with the questions in the right hand column replaced with the appropriate answers. In addition, the response must include a photo of the commercial off the shelf device, a description of the science behind the technology and any references to current literature on the technology.

Table 1. Critical Factors to be addressed in Vendor Responses

Capability	Metric
Dimensions	What are the dimensions of the system (L x W x H)?
Weight	What is the weight of the system?
Operating environment	What are the approximate environmental ranges for temperature, humidity, altitude, etc. that the system can operate in?
Throughput	How many items can the system screen per hour assuming the container is 48" L x 48" W x 60" H?
Level of Automation	Is the system automated (red light/green light operation) or does the operator need to analyze information, interpret data, and decide if a stowaway is present or not?
Power requirements	Describe the power requirements.
Calibration requirements	How often does the system need to be calibrated? How long does the calibration take? Is the calibration process automated or manual?
Training	Provide an estimate of the amount of time it takes to train a new operator? How long does it take to become an expert operator?
System limitations	What are the limitations of the system (e.g., must open sealed containers, must have direct line of sight, cannot screen containers over a certain density/weight, maximum environmental vibration limits)?
Reliability	Assuming a 12 hour screening operation, 6 days a week, what is the estimated Mean Time Between Failures?
Purchase cost	What is the estimated purchase cost of the system (including delivery, installation [if required], and training of two operational teams)?
Lifecycle cost	What is the rough (but defensible) order of magnitude estimates of lifecycle cost and expected useful life of the system?
Warranty	How long is the standard warranty of the system and what does the warranty include and exclude?

Certifications	List all of the certifications or standards the system meets (UL, CE, FCC, ANSI, IEEE, etc.).
Documentation	Provide any system descriptions, marketing brochures, test reports (internal or third-party testing), or any other documentation that will help evaluators assess the system.

On the cover page of your response, please include the following information:

1. The name, size, and principal place of business of the company;
2. The name, address, email address, and telephone number of the company representative to contact regarding all matters concerning this RFI;
3. The CAGE Code, DUNS Number, and business type by the associated North American Industry Classification System (NAICS); and
4. Confirm whether or not the company is registered in the Central Contractor Registration (CCR) database.

Responses must be in Microsoft Word 2007 or earlier format or Portable Document Format (PDF) compatible with Adobe Acrobat 7.0 or Reader 8.

All white paper submissions are due electronically no later than 4:00 PM Eastern time on 12 September 2012. The responses must be sent with RFI# HSHQDC-12-R-00096 clearly displayed on the subject line. DHS reserves the right to review late submissions but can make no guarantee to the order of, or possibility for, review of late submissions. Please submit responses electronically to StowawayDetectRFI@hq.dhs.gov.

Responders will be permitted to submit questions pertaining to this RFI. The Government encourages responders to ask all necessary questions regarding the technical requirements and will endeavor to answer questions to the extent possible. Questions are due no later than 4:00 PM Eastern time on 17 August 2012. Questions should be sent to StowawayDetectRFI@hq.dhs.gov. Answers will be made available to all interested parties via amendments to the RFI posted on FedBizOpps.

Protection of Responses

RFI responses will not be returned. Depending on the markings on the responses, DHS S&T will adhere to the Federal Acquisition Regulation (FAR) policy on handling source selection information and proprietary information. It is the policy of S&T to treat all RFI information as sensitive competitive information.

Proprietary information, if any, should be minimized and must be clearly marked proprietary. To aid DHS, please segregate proprietary information from non-proprietary information. DHS S&T, other Federal agencies, or their support contractors cannot sign submitter nondisclosure agreements.

Please be advised that all submissions become property of the Federal Government and cannot be returned. Responses to this RFI may be evaluated by Government technical experts drawn from staff within DHS S&T and other federal agencies. The Government may use selected support contractor personnel to assist in the evaluation. These support contractors will be bound by appropriate non-disclosure agreements to protect proprietary and source-selection information.