

**First Responders Group
Broad Agency Announcement (BAA) 18-02
Call 0002**

1. **Announcement Number:** BAA 18-02/Call 0002
2. **Solicitation Number:** 70RSAT20RB00000004
3. **Solicitation Open/Close Dates:**
 - Opening Date – 22 June 2020
 - White Paper Due Date: 22 July 2020
 - Anticipated Notification of Encouraged Full Proposals: 5 August 2020
 - Anticipated Proposal Due Date: 1 September 2020
 - Anticipated Performer Technical Presentation dates: 19 October through 23 October 2020

White Papers and Proposals are due by 4:00 p.m. EST time on each due date. There will be no exceptions to the time and date on which responses are due, unless determined otherwise by the Government. White Papers and Proposals received after the closing date/time will not be considered.

Once all white paper offerors have been notified whether or not they have been encouraged to submit a full proposal, Call 0002 will be amended to specify the exact Proposal Due Date.

4. **Solicitation Topics:** The following are the four (4) intended topics, subject to change, under each Technical Topic Area (TTA). Please refer to the attached Statement of Objectives (SOOs) for detailed information.
 - **Integrated Structural Turnout Gear (SOO A)**

Firefighters are required to respond to a variety of first responder situations that require specific turnout gear, garments, vests, and other items to meet the demands of the mission. Currently available turnout gear does not inherently: a) provide adequate visibility per FHWA Regulation 23 CFR Part 634; b) provide ballistic protection for active-shooter or violent events; and c) provide lower extremity protection from chainsaw hazards. Firefighters must change their gear to comply with the situation at hand, often disregarding safety for improved readiness. The integrated structural turnout gear will provide the firefighter with Federal-required high visibility when responding to Federally funded roadway incidents, adequate ballistic protection when responding to violent situations, and cutting/slicing protection to the lower extremities from chainsaw accidents. This gear will meet all NFPA standards for conventional firefighter missions.
 - **Next Generation Firefighter Helmet (SOO B)**

Traditional structure firefighter helmets do not incorporate state-of-the-art technology that maximizes capability and safety. Additionally, current structural firefighting helmets offer no ballistic protection. This puts firefighters at risk when working in violent situations. The solution will incorporate current “best of breed” capabilities and

characteristics of modern firefighting helmets and add National Institute of Justice (NIJ) Level IIIa ballistic protection. This helmet will provide better head protection, increased comfort, increased range of motion, better retention, less probability of snags, easier cleaning and maintenance and other advantages. This solution will also provide firefighters with ballistic protection without having to change headgear.

- **Remote and Rapid Rescue Capability (SOO C)**

Emergency responders of all disciplines may be responsible for locating and rescuing persons that are trapped as a result of an incident or are situated in a difficult-to-reach or dangerous-to-enter location. Because rescue operations are time-sensitive, it is critical for emergency response teams to be able to rapidly rescue persons who are stranded or trapped. Most traditional approaches can be time-consuming and oftentimes increase risk for emergency responders. Improved remote and rapid rescue tools are needed in order to improve the survivability of casualties and increase responder safety. The solution should quickly deploy an unmanned device or vehicle to locate a stranded or trapped person, hook or load them, and carry them to safety. The solution would be able to do this from the ground, in the water, and/or from the air as rescue missions may vary. Further, the solution would also carry payloads to assist casualties by delivering food, water, medicine, or other supplies crucial to survival.

- **Portable Thermal Imager integrated with other Signs of Life Sensors (SOO D)**

Emergency responders need to quickly identify signs of life during emergency response operations in order to improve rescue and increase survival rates. Signs of life may include breathing, blood pressure, body heat, pulse, movement, and speech. Existing tools are designed for large-scale events. Responders need a handheld version of this tool, integrated with thermal imaging for use in a wide variety of operations by fire service, law enforcement, and emergency medical personnel. The solution should be able to be used on a day-to-day basis to augment the ability to locate persons who are trapped, in distress, hiding (e.g., children), avoiding detection or lost and should work as close to real-time as possible. The tool should be designed for use by multiple disciplines and for use in a variety of environments (hot, cold, wet, dry. Etc.)

5. **Number of Awards:** It is anticipated that one (1) award will be made for each topic area. However, multiple awards or no award may be made for each topic area depending on the quality of the proposals, individual funding requests, and total availability of funds.

6. **Operational Experimentation (OpEx) Activity:**

S &T may also invite vendors to participate in an Operational Experimentation (OpEx) Activity. The DHS S&T OpEx Program connects homeland security end users, technology innovators, and the interagency community to assess cutting-edge technology in operational settings and facilitate technology demonstrations for homeland security operators. DHS S&T OpEx supports homeland security components, including the First Responder Portfolio, by hosting OpEx activities in operational experimentation, operationally focused technology scouting, and hands-on technology demonstration opportunities to inform the department's research and development investments.

OpEx Activities can take several different forms, including:

- **Vendor Technology Demonstration:** A technology provider demonstrates solution capabilities in an operationally realistic environment to allow the Government and relevant end-users to interact with and observe the capabilities of the solution.
- **Field Experiment:** A technology provider participates in a large-scale scenario-based event with independent evaluators and end-users providing feedback on the performance of the solutions in a realistic field experiment.

Offerors who participate in an OpEx Activity may be asked to sign a Cooperative Research and Development Agreement (CRADA). Further details on CRADA's and the outcome of any particular OpEx Activity will be determined prior to any formal engagement between the Government and the Offeror. Offerors may indicate in their submission if they would like to be considered for an OpEx if they are not selected or there are insufficient funds to award a contract.

Offerors may also include a quad chart as part of their proposal which will not be considered as part of their page limit cap for submission. A quad chart is a one-page visual representation of a solution's technical capabilities, divided into four quadrants. A template is provided in Attachment 1.

- 7. Anticipated Ceiling:** See BAA 18-02, Section 3 – Award Information regarding anticipated ceiling.
- 8. Award Type:** See BAA 18-02, Section 3 – Award Information regarding award types.
- 9. Anticipated Award Dates:** The 1st Quarter of Fiscal Year 2021 is when the government anticipates making awards. However, the award date for each topic area may vary based on the quality of the proposals and the availability of funds.
- 10. White Paper Instructions:** Offerors shall submit their white papers in accordance with BAA 18-02, Section 5- Application and Submission Information.
- 11. Proposal Instructions:** Offerors shall submit their proposals in accordance with BAA 18-02, Section 5 – Application and Submission Information.
- 12. Evaluation Criteria:** Proposals will be evaluated in accordance with the evaluation criteria contained in the BAA 18-02, Section 6 – Evaluation Information.
- 13. Performer Technical Presentations Instructions:** Performer Technical Presentations will be held under this call and shall be in the format as contained in BAA 18-02, Section 5- Application and Submission Information. All offerors who submit full proposals shall be notified of their presentation date and time within 3 days of the proposal due date.
- 14. Foreign Government Participation:** This BAA Call intends to have foreign government participation, to include review of both white papers and proposal submissions for purposes

of determining possible joint-funding and to include joint participation in overseeing projects throughout the contract period of performance.

Foreign government participation will be determined by technical topic area based on DHS collaboration and may include any of the following international partners:

- 1) Canada
- 2) The United Kingdom
- 3) The European Union
- 3) Australia
- 4) Singapore
- 5) Mexico
- 6) Israel
- 7) New Zealand
- 8) Republic of Korea
- 9) Japan

Foreign government personnel from any one of the aforementioned countries may participate in the evaluation process as peer/scientific reviewers of submitted white papers and/or proposals. Once DHS has determined that foreign government personnel will participate, as peer/scientific reviewers or as joint participants in overseeing projects, under a specific TTA, each offeror who proposes under the specific TTA will be contacted by the Contracting Officer to obtain the offeror's consent to sharing their white paper/proposal with a foreign government. Foreign government personnel will not access an offeror's white paper or proposal unless DHS receives consent. In the event that foreign government personnel do participate in the evaluation process, foreign government personnel will not be permitted to release any information to third parties, including others in their organization.

15. Export Control Notification: All offerors are responsible for ensuring compliance with all export control laws and regulations that may be applicable to the export of and foreign access to their proposed technologies. Offerors should consult with the Department of State with any questions regarding the International Traffic in Arms Regulation (ITAR) (22 CFR Parts 120-130) and /or the Department of Commerce regarding the Export Administration Regulations (15 CFR Parts 730-774). If you are awarded a contract under this BAA, in the absence of available license exemptions/exceptions, you are responsible for:

- Obtaining any appropriate licenses or other approvals, if required, for exports of (including deemed exports) hardware, technical data, and software, or for the provision of technical assistance.
- Obtaining export licenses, if required, before utilizing foreign persons in the performance of a contract, including but not limited to instances where the work is to be performed on-site at any Government installation (whether in or outside the United States), where the foreign person will have access to export-controlled technologies, including technical data or software.
- All regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions.
- Ensuring that all applicable provisions herein apply to your subcontractors.

16. Questions: Any questions concerning this call must be submitted via email to the Contracting Officer at Jenista.Tobias@HQ.DHS.GOV no later than **Friday, July 10, 2020, 2:00 PM EST** in the following format:

Question #	Reference	Contractors' Question
1	General (if there is no specific document reference)	
2	(Example) BAA 18-02, page 15, Section 5.2, first paragraph, second sentence	
3	(Example) BAA 18-02/Call 0001, page 2, Section 9, first sentence	
4	(Example) SOO C, page 2, Section 5.1, second paragraph, second sentence	

Please include “Questions for BAA 18-02 Call 0001/SOO No. x” in the subject line. All questions and responses will be posted on the Federal Business Opportunities website <https://beta.sam.gov/> and on <https://baa2.st.dhs.gov>. Questions will only be accepted or answered electronically.

17. Attachments:

SOO No.	SOO/TTA Title
A	Integrated Structural Turnout Gear
B	Next Generation Firefighter Helmet
C	Rapid and Remote Rescue System
D	Portable Thermal Imager integrated with FINDER

18. Additional Information: In the event that any of the information contained in the SOOs conflict with BAA 18-02 (for example, Government Furnished Equipment/ Information/Property) the individual SOO shall take precedence.

Attachment 1

FRD BAA Quad Chart	
[Offeror Name] [BAA Call Number]	
<p style="text-align: center;"><u>Tech Snapshot</u></p> <ul style="list-style-type: none">• System photo or diagram• System Name• Include components, platform, and/or support package with transportation.	<p style="text-align: center;"><u>Capability Summary</u></p> <ul style="list-style-type: none">• Describe status (existing, under development, etc.) and current capabilities of technology• Describe how the system would provide new or enhanced operational capabilities to the user• Explain why the technology is uniquely suited to fulfill key requirements
<p style="text-align: center;"><u>Solution Description</u></p> <ul style="list-style-type: none">• Describe basic technology involved and how it will be used to aid first responders• List current and future development efforts• Convey ability to integrate with existing public safety systems• Do you have a common Data format?• Software Government owned or proprietary (Y/N)?• Is the system ITAR restricted?	<p style="text-align: center;"><u>Demonstration Requirements</u></p> <ul style="list-style-type: none">• Convey the concept, capability, and any relevant size/weight/power information• Physical descriptions as necessary for clarification• Estimated number of end-users and duration of training required to operate.• Describe physical or environmental limitations/constraints to effective demonstration or experimentation.• Other information vendor deems relevant to DHS S&T.

 **Homeland Security**
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