First Responders Group Broad Agency Announcement (BAA) 18-02 Call 0003

1. Announcement Number: BAA 18-02/Call 0003

2. Solicitation Number: 70RSAT21RB00000006

3. Solicitation Open/Close Dates:

- Opening Date 2 June 2021
- White Paper Due Date: 2 July 2021
- Anticipated Notification of Encouraged Full Proposals: 27 July 2021
- Anticipated Proposal Due Date: 27 August 2021
- Anticipated Performer Technical Presentation dates: 1 October through 8 October 2021

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 0003 will be amended to specify the exact Proposal Due Date.

4. Solicitation Topics: The following are the ten (10) intended topics, subject to change, under each Technical Topic Area (TTA). Please refer to the attached Statement of Objectives (SOOs) for detailed information.

• Updated Law Enforcement Duty Uniform (SOO A)

The traditional law enforcement (LE) uniform follows three basic principles: form, function, and fit. The fabrics used for LE uniforms have been based on natural fibers such as wool and cotton. However, there has been a shift to employing more man-made materials such as polyester and synthetics as well as cotton and wool synthetic blends. An updated LE duty uniform should offer more base layer protection against abrasion, slashing/puncture, burn injuries, and absorption of liquids. The more confidence an officer has in the protective capabilities of his or her uniform, the more successful he/she will be in the completing duty assignments safely.

• Low Profile Riot Protection Gear (SOO B)

First responders require personal protective equipment (PPE), or protective gear, when responding to the range of violent threats that can occur during demonstrations, riots, or civil unrest. The PPE or riot protective gear that first responders currently have is insufficient for the evolving threat environment. First responders require new PPE that can be worn while they are working crowd control situations, demonstrations, and crowd management. This includes proposed solutions for any clothing, accessories, or devices that first responders may wear or carry to protect themselves in the field.

• Riot Protection Helmet (SOO C)

Law enforcement officers and first responders require a helmet that provides protection against concussive and ballistic threats, which are both important for responding to incidents of civil unrest. Currently, the helmets worn by law enforcement officers and first responders during riot situations lack protection against both concussive and some level of ballistic threats. The solution will provide law enforcement officers and first responders with a multi-purpose and customizable helmet that is lightweight, comfortable, and able to be worn for long periods of time during civil unrest or riot situations. The solution must meet all applicable standards for riot protection helmets, including the PSDB Protective Headwear Standard for UK Police (2004) pending those being developed by the National Institute of Justice (NIJ).

• Less-Lethal Chemical Irritants for Crowd Control (SOO D)

Chemical irritants (CIs) are a type of less-lethal tool that helps law enforcement deescalate situations by creating time and/or distance in large crowds down to the individual in a dense urban environment and stop unlawful activity without needing to elevate to a higher level of force. Less-lethal chemical irritants will provide increased mitigation and arrest capabilities for criminal activity in crowd situations. CIs should address the legal, medical, and environmental challenges faced by existing CIs in addressing individuals and small groups engaged in criminal activity occurring near protected First Amendment activity, and/or dispersing a crowd in the event of a dispersal order not being followed.

• Less-Lethal Options for Crowd Environments (SOO E)

Less-lethal tools help law enforcement deescalate situations by creating time and/or distance in large crowds and stopping unlawful activity without needing to elevate to a higher level of force. There is a need to more effective less-lethal tools that minimize unintended impacts and assist law enforcement in addressing individuals and small groups engaged in criminal activity occurring near protected First Amendment activity and/or dispersing a crowd in the event of a dispersal order not being followed. Potential solutions should have a positive outcome to the emergency responder community and the general public because as more effective less-lethal tools and tactics are developed, the potential for the use of more force to be utilized, up to and including lethal force, is decreased.

• Tracking Criminal Actors in Large Crowds (SOO F)

When conducting crowd control activities, law enforcement officers and first responders do not have a solution that enables them to track (overtly/covertly) active or known criminals, or individuals within large groups who engage in criminal activities. The proposed solution would need to work in real time and in a variety of conditions, including low light or poor visibility. It is essential that the solution be reliable and able to differentiate between the intended criminal target versus other persons who may be dressed the same, wearing disguises, or otherwise appear similar. Of utmost importance, the solution must uphold civil liberties, existing laws, and privacy applications.

• Multi-spectrum Laser Detection (SOO G)

First responders, particularly law enforcement officers responding to civil unrest situations, need a multi-spectrum laser detection capability. Currently, there is no viable solution that allows officers to detect the presence or engagement of lasers that can be initiated from multiple light spectrums including red, blue, green, and infrared. The proposed solution shall leverage existing and new technologies to provide officers with a system that will detect multi-spectrum lasers and/or infrared light as they perform their duties.

• Multi-spectrum Laser Eyewear Protection (SOO H)

First responders, particularly law enforcement officers responding to civil unrest situations, need multi-spectrum eye protection from lasers. Currently, there is no single solution that protects officers from multi-spectrums including, red, blue, green, and infrared. Current protection options are often incompatible with other equipment, such as gas masks, or obstruct visual acuity at night, as well as in the dark or smoky conditions. The proposed solution shall leverage existing and new technologies to provide officers with eye protection from multi-spectrum threat of lasers and/or infrared light as they perform their duties.

• Rapidly Deployed Physical Barriers for Area Denial (SOO I)

First responders require barriers that can be rapidly deployed and are able to safely contain or channel protesters or rioters without being easily destroyed. During events of widespread civil unrest, first responders commonly found they lacked the barriers necessary to safely protect the public, themselves, and surrounding infrastructure.

REDOPS (SOO J)

The use of improvised explosive devices (IED) remains a high threat due to the proliferation of technical knowledge, compounded by collapsing technology costs and use of the internet to motivate and instruct sympathizers to employ IEDs. While significant investments are made on explosive detection, there is limited investments being made to ensure bomb technicians have the capabilities to preserve life and/or property once an IED has been discovered. First Responder bomb technicians require assessment and characterization of tools, tactics, techniques, and procedures to ensure public safety bomb squad capabilities meet the evolving threats and improve existing capabilities.

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 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 2022 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 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 CRF Parts 120-130) and /or the Department of Commerce regarding the Export Administration Regulations (15 CRF 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 onsite 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 Wednesday, June 16, 2021, 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 0003, 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 0003/SOO No. x" in the subject line. All questions and responses will be posted on the Federal Business Opportunities website https://www.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	Updated Law Enforcement Duty Uniform
В	Low Profile Riot Protection Gear
C	Riot Protection Helmet
D	Less-Lethal Chemical Irritants for Crowd Control
E	Less-Lethal Options for Crowd Environments
F	Tracking Criminal Actors in Large Crowds
G	Multi-Spectrum Laser Detection
Н	Multi-Spectrum Laser Eyewear Protection
I	Rapidly Deployed Physical Barriers for Area Denial
J	REDOPS

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]

Tech Snapshot

- · System photo or diagram
- System Name
- Include components, platform, and/or support package with transportation.

Capability Summary

- 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

Solution Description

- 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?



Demonstration Requirements

- 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.

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