Less Lethal Weapons (subjects at a distance) Market Exploration

Summary

The Defence and Security Accelerator (DASA) and the Defence Science and Technology Laboratory (Dstl) are scoping the potential for an innovation challenge to showcase, procure or develop mature concepts and technologies for less lethal weapon systems for law enforcement officers to deal with subjects at distance. To aid in the design of this type of equipment, we are undertaking market engagement in order to provide us with an understanding of current technologies available.

Please note that this request for information is not a commitment to subsequently launch a formal DASA competition or undertake any procurement activity.

Background

In armed, public order and conventional policing scenarios, officers are often required to use force to deal with a threat to the public, bystanders or police, from violent or armed subjects. This use of force may be by the police or the military in law enforcement roles. The force used to counter the threat must be reasonable, proportionate and discriminatory, and the availability of less lethal options can potentially enable officers to resolve a situation prior to it becoming absolutely necessary to use lethal force.

Currently the police have access to conducted energy weapons which use electricity to achieve an incapacitating effect from up to 6 metres, attenuating energy projectiles which are a kinetic energy based solution providing pain compliance/distraction effects at ranges of less than 40 metres, and irritant sprays which provide sensory irritation effects up to about 3 metres.

This market exploration will investigate technologies or approaches which can be used to provide the police and law enforcement officers with new less lethal capabilities which may augment the above capabilities. These techniques will be exploited directly in support of the UK’s law enforcement operations.

What we want

To identify new less lethal technologies that may assist law enforcement personnel when dealing with subjects at distance, we would like to focus on technologies or systems that are judged to have potential to provide the effects required by the police and be as good as or better than existing equipment. This may include technologies that have not been deployed

operationally before or could include a combination of different technologies / mechanisms / techniques to provide augmented effects.

If officers were to have the capability to incapacitate and/or distract a subject at distance it would enable them to create a ‘safe’ area around the subject. This would then allow for other tactics to be considered such as negotiation for compliance. Additionally, the ability to mark a subject in order to ‘identify’ them at a later time would also be desirable for a system, especially for use in public order situations where the perpetrator of a crime may not be easy to apprehend at the time of the offence.

The key requirements for any such less lethal weapon system include:

- the system should be able to accurately temporarily neutralise the subject over 5 metres and ideally up to 50 metres (with stretch target of 1 metre to 70 metres)
- the system must be effective against a moving target
- the system must be of a size and weight commensurate with, or can be adapted to be carried / used for, normal dismounted policing duties including routine patrol, public order and firearms
- the system must be reliable in use and consistent when activated
- the system must have second or multiple shots readily available
- the system shall be able to operate within weather conditions typical for the UK including rain. Ideally this system should be able to be used in any Crown Dependencies or in support of international deployments.

We are particularly interested in solutions that are mature, either commercially available or near market. We have some interest in solutions that may require some development work to be applied to this scenario.

Submissions should be provided by teams with the experience and knowledge necessary to establish sound scientific evidence for any potential technology and associated hardware.

By completing the submission neither DASA, Dstl nor yourselves are committing to anything further. However, your submission may be used to help us focus the direction and shape the requirements for a possible procurement or DASA themed competition in the future.

Your submission will also help us to identify your interests, and where appropriate we can introduce you to your regional DASA Innovation Partner to discuss any future activity.

What we do not want

We are not interested in receiving ideas for literature reviews, plans for paper-based studies, emerging concepts or marginal improvements to existing capabilities.

While we are interested in solutions that may require some development to support this application, if your idea is of low maturity please consider the Innovation Focus Area (IFA) on Advancing less-lethal weapon capability.

This is not a competition and therefore we are not asking for costed proposals at this stage. This is a market engagement request for information exercise and we do not commit to subsequently launch a formal DASA competition or undertake any procurement activity.

How to submit a capability submission form

Responses to this market exploration must be submitted via the DASA submission service, for which you will be required to register.

Please only provide details of one product / capability per submission. If you have a number of potential solutions, then please submit these separately.

Submissions must be submitted by midday on 27 November 2019.

If you have any questions then please email accelerator@dstl.gov.uk with Less Lethal Weapons in the subject line.

How we use your information

Information you provide to us, that is not already available to us from other sources, will be handled in-confidence. By submitting a market exploration response you are giving us permission to keep and use the information for our internal purposes, and to provide the information onwards, in-confidence, within UK Government. The Defence and Security Accelerator will not use or disclose the information for any other purpose, without first requesting permission to do so.