Clarification Questions & Answers

Challenge: Rapidly Deployed Tech to Track Intruders

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Question	Answer
Is travel to specialist facilities / physical co-creation spaces expected during the project?	Yes
How many projects (£60k) will/can be funded against this call?	1
The title of the call refers to "tracking". Is this meant, or is it just detection?	Detection is more important.
Is there equal weighting for each of the 5 criteria?	Yes
Would you prefer a new novel system/solution (Low TRL to start with, fully bespoke), or are you hoping to utilise products already functional in the market (rapid turnaround, less flexibility)?	Open to TRL 4 to 7 systems. Although we could be open to commercial-off-the-shelf (COTS) products, as long as they are innovative, novel and potentially able to be modified or adapted.
What is the minimum TRL you accept for this competition?	4
How long before it would be expected that the system would be fully complete as a final product?	Ideally within the order of months.
Do you have any steer on how long it needs to run without mains power?	Up to 24 hours likely required.
Are RGB cameras allowed as part of the solution as well as additional sensors?	Yes, but as part of the solution.
How do you define intruder?	The system needs to detect the presence of a person but does not have to distinguish between authorised and un-authorised people.
Is there any size specification requirement for portability?	Airline carry-on cabin bag size preferred per unit.
Is the size of the facility from 1 room up to a building or site / what's the range of sizing?	Aim for a system to cover the size of a small one-bedroom flat, say around a 50m squared space per system.
Is there a response time specified for detecting a person?	Ideally within a second. But the key is the ability to detect an intruder, and have confidence that it is not a false alarm, or for the system to be tampered with.

Is there a target reference development of classification of the solution(s)?	OFFICIAL (i.e. Open)
Should we assume that the system should not record activity outside the protected space to avoid violating local privacy laws?	It could detect perimeter activity, however, it doesn't have to identify people. The key is to protect the defined space. Anything outside the space is a "Could" but not a requirement.
You mentioned detection of animals etc., are spaces likely to include external areas as well?	The primary focus is internal areas. Monitoring external areas would be useful but this is a secondary capability.
Are UAVs/UGVs with sensors and software from other collaborators of interest?	No
Will non-UK companies be considered?	Yes
Any steer on the distance / connectivity requirements for remote monitoring?	Systems that are restricted to communication over short distances will be considered as long as they can be integrated with other longer range methods.
You mentioned the API, how important is the Dstl SAPIENT protocol for connecting sensors together and to a central node?	Not required.
How much of the wider system OPSEC needs to be solved for, i.e. that the local sensors may be compromised by an adversary, and risk the central operation where sensor data is sent on to?	This is not a consideration for this challenge.
£60k seems low for the development of a minimum viable product (MVP) from a concept or idea, you must be expecting a lot of background IP to be brought to bear here?	We are seeking a MVP to address the key requirements as far as possible.
Should a platform support more basic sensors in the future, or would this be handled by integrating with conventional IDS?	If it can that would be good but not a requirement
Will slides be shared prior to submission deadline?	No. However, these Questions and Answers are available.
What is the wider opportunity - are you expecting there be follow on development phases?	There is the possibility for follow-on phases.
Can you outline what level of engagement you are looking for to engage with us on the project (e.g. Product Owner daily/sprint ceremonies/less frequently, HMGCC PMs etc)?	Expected to work as 3 Sprints of 4 weeks duration. Initial Kick-Off and Sprint Review meetings with HMGCC team expected to be face-to-face. Additional mid-Sprint virtual meetings likely. However, we are flexible and

	will agree the meeting cadence with the successful Solution Provider.
When it comes to user interface, is using a licensed cloud to push notification to a user phone app within the requirements?	The system does need to integrate within some form of notification. The main requirement would be needing the API to allow this to push notifications.
Are there any requirements for regulatory or safety certification?	Whilst not essential for the MVP, the product would need to pass CE testing (and equivalent).
Are there any transmission frequencies we should avoid?	An ISM band or a band that could be licensed is required. Ability to use overseas needs to be considered.
Do we have a list of test criteria so that if anyone wins the bid they know how the system will be qualified?	Not at this stage, a later concern.
Should it be ruggedized to prevent physical attacks?	Not required but it should have an anti-tamper capability.
Should it be small enough to hide?	Not required.
Is there a maximum consortium size?	No
Could you clarify why conventional cameras and PIR sensors are out of scope, or why they are considered to not provide the necessary performance please? There are now AI-enabled human-detection functions on commercially available security cameras which could in principle solve the problem, but you have clearly discounted this. We're interest to know why?	What we were trying to avoid are products that we could easily purchase and deploy ourselves. We already have a number of systems that are based on these types of technologies, and the purpose of this challenge was to "think outside the box" with more novel approaches.
Could you clarify what is defined as "novel" sensors? Is this just non-traditional sensors, but technically mature ones? Or are you seeking genuinely novel sensors? Could you also provide an entry TRL for solutions you're looking for?	TRL 4 as a minimum. Regarding "Novel", we are looking for products that are not commonly available or deployed solutions – ideally not something that we could buy off the shelf.