**Countering Drones**

**Phase 2 Briefing Q&A Responses**

This document provides answers to clarification questions raised by participants at the Countering Drones Phase 2 briefing webinar held on 01 June 2020

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|  | **Question** | **Answer** |
| 1. | Notwithstanding the delay of Phase 1, will you be releasing results/code (preliminary if required) from the already funded competitions? | For Phase 1 contracts we have rights of use under DEFCON 705. The rights of use may allow us to share outputs of Phase 1 in confidence under Phase 2 contracts for the purpose of carrying out work under Phase 2. The list of projects funded under Phase 1 can be found on the [DASA website](https://www.gov.uk/government/publications/accelerator-funded-contracts/defence-and-security-accelerator-funded-contracts-1-april-2019-to-31-march-2020#countering-drones).  |
| 2. | Do you expect Phase 2 projects to build on Phase 1 successful applications (given they won). Realistically are those already engaged at an advantage? | Do we expect phase 2 to build on phase one? - For successful Phase 1 project, we would like to see suppliers develop and mature their technologies. However, new solutions to the challenges listed are also welcomed.Are successful phase 1 applicants at an advantage? We are looking for evidence that the technology and solutions are viable. Phase 1 suppliers would have done this throughout their projects, which will provide some of the evidence required for this. Non-phase 1 applicants that can show evidence of viability in other ways will have just as much chance of success. The onus will be on applicants to demonstrate the evidence in their proposal. It is an open competition and each proposal will be considered on its own merit.  |
| 3. | What's more attractive to DASA... A new "counter UAS" solution, or an extension of existing systems (EO/IR, Electronic Support, ECM, etc.) that already exist? | Each proposal will be assessed by a team of experts, we will look to get a specialist in the relevant discipline, a key stakeholder and a CUAS SME to review each proposal. They will be rated how desirable they will be to the end users, as well as the feasibility of the technology. We are after a significant enhancement on a current capability, if that enhancement does feature a step change in capability to detect UAS then it will be considered an attractive option and will be scored accordingly.In Phase 1 we saw internal product development of existing systems being proposed; that is not the purpose of this competition, we are looking towards the next generation and are more in favour of radical solutions. Remember this is a R&D project rather than a product development |
| 4. | Does the costed option for a demo have to be within the £350k budget, or additional? | The upper limit for the proposals is £350k. The costed option is not included in that figure. |
| 5. | Is there a preference between the use of active and passive sensors | No, we will likely need both depending on circumstances; there are benefits to each approach. Each will be assessed on their own merits. |
| 6. | Will involvement of DSTL in SAPIENT integration need to be costed into the bid or will this be provided free of charge? | There will be some elements that will provided as Government Furnished Information (GFI), free to the project, such as the interface control document and the test harness to ensure the module is outputting the right info in the right format. However the integration of your component into SAPIENT and making sure that it is compatible needs to be undertaken by the supplier and costed into your proposal .  |
| 7. | Are you engaging with UKRI Future Flight Challenge at all - many of which are looking for CUAS solutions as a part of enabling drones, which include CNI sites? | Yes, the projects within Dstl are linked up with other agencies are moving forwards with the rest of the UK C-UAS space, this includes UKRI. |
| 8. | What types of 'outputs' are expected? | We are looking for a demonstration at the end of phase 2, these will be attended by the technical partner and the relevant stakeholders from the CUAS community (if appropriate), we are looking for a report at the end of the project which describes the work completed and the technology, performance, expected future performance and how this can be exploited. We also have asked that data generated or used during any trials or demonstrations should be provided where applicable.  |
| 9. | How important is compliance with the SAPIENT standard for achieving funding? | Reasonably important, but not essential. It demonstrates a reasonable understanding in how it can be used going forward, and easier ways of taking it to test events and linking with other components. We are aware there are other approaches, but the important piece is that if your technology is a component/subsystem there is a good understanding of how it can link in with other components and the requirements on that. The CUAS space is not a single sensor solution, we need to understand how the sensor/system can be integrated with other sensors/systems. SAPIENT is our preferred method. |
| 10. | Novel technology maturation & systems level integration to demonstrate a solution is expensive, can the funding limit be relaxed for collaborative bids? | It is part of the criteria for pass/fail that you are within the £350K limit. The funding limit will not be relaxed as it has been set as part of the competition rules. |
| 11. | Will the government hosted trial be on a specific date or will it be up to proposers to set the date and duration. Will it be by invite only? | Yes, specific date (not yet set)/location set by Dstl; that is not movable.Invite Only. If you have provided a costed option to deploy to the trial the decision to take that up will be made by Dstl as the project progresses |
| 12. | For companies with compatible system components, and potential to utilise Phase 1 outputs: Is there a team building event or any forum to expedite that process? | Not during the open competition of the call. For Phase 1 we did hold an open invitation, collaboration event in London; we will be looking to host something similar during Phase 2 once projects are on contract. |
| 13. | Challenge 1 - are you looking for fully autonomous sensor-to-effector operations or is it just the sensing part you want/expect to be autonomous? | We are expecting a human in the loop to authorise the use of an effector, but this may take different forms depending on what the effector is. Highly automated sensing capability, with decision aided command and control is preferred, such as an ability to inform the best choice of effector or give an understanding of the implications of using that effector, such as its collateral footprint, but we expect the authorisation to deploy and effector will come from a human in the loop. |
| 14. | Is teaming and collaboration considered in assessment? | Yes, this is in scope and an ethos we would encourage. If this is a possibility, highlight in your proposal submission. As part of the standard DASA assessment criteria, the expertise of the project team will be considered. |
| 15. | Are there opportunities for additional 1-2-1 sessions? | No plan for any additional 1-2-1 sessions. We advise you go to the contact us page on the DASA website to get in touch with your regional innovation partner.  |
| 16. | Do you fund on a full economic cost basis or direct costs of research only? | Academia should submit their proposals on the basis of Full Economic Costing i.e. all costs inc. overheads/indirect costs. |
| 17. | Can Dstl provide a SAPIENT HLDMM as GFE to enable systems level demonstration? | This is something we are looking at, we do not have a definitive answer at present. For the costed option demonstrations it is important feature of an integrated SAPIENT system, and is something we will be working up in due course.HLDMM - High Level Decision Making Module, a SAPIENT module that has 2 roles, 1) the sensing fusion brain in the network, making sense and reasoning over sensor declarations 2) tasking sensors or optimising sensors to the most appropriate setting, i.e. panning a narrow field of view sensor onto a particular location or adjusting the scan rate/RF properties of another sensor.  |
| 18. | Will the demo be conducted in private, and will the proposers be allowed to attend the demo/ oversee it? | 1) Supplier demo at their own location/premises, this is private to the supplier. We expect the Dstl technical partner to be present along with interested stakeholders from government.2) The final government hosted demonstration - closed event access, no public or uninvited personnel, but there may be other suppliers/contractors/stakeholders present. We will take measures to help you best protect your IP, i.e. have your own work areas, interfaces/tech out of view. In the past we have witnessed significant benefits to our suppliers from being within close proximity to others working in the same area. It’s an opportunity to network and expand your own knowledge.  |
| 19. | Whom is the technical partner for independent trials at the end of phase 2? | From the outset of being a successful bid, you will be assigned a Dstl Technical Partner throughout the life of the project, a specialist in that particular field to provide you that link into the competition, regular communication will be made to ensure the project is progressing in the right direction. It is this technical partner that will be with you for all trials at the end of Phase 2.  |
| 20. | How many separate contracts are expected to be let as part of Phase 2? | Within the current funding we have available in the Air Systems Programme we anticipate 4-6 Phase 2 contracts to be available as a minimum. There is the potential for more from other research programmes or if we successfully partner with other government departments.  |
| 21. | What is the desired completion date for phase 2? | We aim for the competition to be complete 12 months from getting on contract. This is anticipated to be October 2021.Additional note: Please give milestone dates in months from the start of the contract. e.g. milestone 1: 2 months from start of contract. Last milestone - maximum 12 months |
| 22. | Will multiple proposals from a single organisation be treated on their own merits, or is there a limit? | There is no limit and each proposal will be assessed on it's own merit. If successful please ensure that you are able to resource them. We can only fund a proposal as it is presented on the bid. Please keep in mind we cannot take pieces from each proposal. |
| 23. | Does 'integration' mean with other complementary CUAS systems or to other security systems (e.g. CCTV) or both? | In the competition document "Integration" primarily referred to other complementary C-UAS elements. However this is not exclusive, there may be many benefits with linking in other security systems (or Unmanned Traffic Management).  |
| 24. | Will the industry contractors details be shared for future collaborations/opportunities? | With reference to phase one, we linked in the Competition Document a list of successful projects and companies from phase one, this will be the only information shared. As part of the registration for this event there was an option to share your details with other suppliers, if you have agreed to this we will be sharing your details with other attendees. |
|  | **Questions not addressed at event due time limitations** |   |
| 25. | Should proposals focus on one or cross several of the challenges? | The proposals should address at least one of the challenges, but may be relevant to multiple challenges |
| 26. | Please can you confirm that phase 2 is purely a physical demand rather than a conceptual simulation outcome? | In the majority of cases we want the technology to be physically demonstrated in some way. However, some proposals may only be able to be simulated due to their nature; this is acceptable, provided it is justified and is set up to provide the evidence of the technology feasibility/development potential |
| 27. | Are two demonstrations expected? One private by supplier and one via Dstl? Both costed within 350k? | One demonstration will be expected, at the end of the project showing progress. This is preferably a physical live demonstration, however can be simulated demo, if this is unavoidable and justified. The demonstration will be run and hosted by yourself (Supplier) at your location of choosing. This should be included within the cost of the proposal and the £350k cap.The government (Dstl) hosted trial is optional; should suppliers feel their project is suitable they are invited to submit a costed contract option to deploy to the trial. |
| 28. | Can a foreign national (technical expert) attend the demos (i.e. to run the show)? | If the person wishing to attend the demonstration has been cleared under the Authority’s Personnel Security (Research Worker Form) process, and are named in the contract then they can participate. |
| 29. | What level of CAA rules will apply at demos? I.e. will drone pilots need to be PFCO (=commercial activity) of can they be tech experts (=non commercial)? | The supplier demonstration will be your responsibility, you will need to supply the relevant target platforms, CAA approvals, insurance and suitably qualified pilots. Dstl will be observers.For the final government run trial, we will supply pilots and target platforms (as per the assumptions in the Competition Document).If your system incorporates an airborne UAS then you will need to provide drone pilots with PFCO. You will also be responsible for obtaining the relevant CAA permissions and insurance for commercial operations.  |
| 30. | Are we able to provide completely standalone solutions with no SAPIENT integration across the three challenges? | Yes, however your bid is likely to be less attractive as a result unless there is a compelling reason/alternative. We are looking for sensors/systems to be easily integrated with other systems. SAPIENT is our preferred method of integration. |
| 31. | Is there a preference to provide solutions built on on-premise or cloud infrastructure? | There is no preference. However, please consider that potential trial locations could be remote with limited network access.  |
| 32. | What is the expectation of in-life/post support. Should the systems be designed to be self managed by personnel rather than relying on solution providers? | This competition aims to raise the bar, looking at next generation systems, therefore we do not expect a high level of ruggidisation or through life support at this stage. Technologies that inherently require low operator burden and minimal service support are desirable however. Projects are encouraged to consider the requirement for/impact of human support for the technology and articulate it as part of a development roadmap for eventual exploitation. |
| 33. | Is there any specific drone protocols or frequencies which the solution should be able to detect, identify, track and defeat? i.e. 433MHz? | As the competition is aiming to address the challenges faced by a broad and rapidly evolving threat, solutions should consider how applicable their technology to the spectrum of existing frequencies and protocols, as well as new or novel communication, both known and unknown when the threat first presents.  |
| 34. | What is the latest SAPIENT version and will it be published? The version online is QINETIQ/TIS/C4ISR/ICD1400047/v4.127th November 2015 | SAPIENT ICD V5 is expected to be ratified and released before contract award.  |
| 35. | Where do we find out more about SAPIENT? | [www.gov.uk/sapient](http://www.gov.uk/sapient)There are also a number of papers available through SPIE, the international society for optics and photonics (spie.org). |
| 36. | How does DASA funding affect EU de-minimus rules? | DASA funding of successful proposals is not state aid as we are procuring R&D services at full market value via an open competitive tender, therefore the De Minimis Regulation does not apply. |
| 37. | Will the slide deck be distributed? | The slide deck was distributed to attendees prior to the event. If you did not receive a copy please contact accelerator@dstl.gov.uk |
| 38. | Are T&Cs negotiable? | No. On submission of a proposal you will be asked to agree to the terms and conditions. We require unqualified acceptance of these (as contained in the mandatory criteria table, section 7.5). We also require you to have obtained the authority to accept the terms and conditions. If a supplier is informed they have been successful following the decision conference there will not be an opportunity to negotiate T&Cs. |
| 39. | Who will own any capital equipment bought for the project, and can it be sold/used for revenue earning afterwards? | The Authority retains ownership and any equipment bought specifically to fulfil the contract becomes a project asset. It will need to be agreed what will happen to that asset at the end of the task - disposal options could include project keeping ownership and using for future work, loaning to another project, loaning back to the supplier for a future task etc. The following applies in the contract 'Contractor Acquired Materiala. Upon purchase, legal title in any items costing £10,000 or more and with an economic life of more than 12 months purchased by the Contractor within the total contract price for the purposes of performing the contract shall vest with the Authority. Such items shall become Government Furnished Equipment provided to the Contractor by the Authority on loan in accordance with DEFCON 611 (ISC) (Issued Property)If a supplier intends to sell/use a particular capital asset further, then the supplier should consider whether it is appropriate to directly charge that as a cost in their proposal to the Authority, noting that in accordance with the terms and conditions we may take ownership of such assets. |