Invisible Shield DASA Launch

This document provides answers to clarification questions raised by participants at the Invisible Shield launch event held on 29 April 2020

Serial	Question	Answer
1.	Interested to understand if this capability is to include C-CBRN, especially with the merging of C- IED, C-EOD & C-CBRN to the C- EO role as a joint capability?	The MOD capability sponsorship for ECM and CBRN resides in the same team, but the capability in itself is not combined or joint. It is noted that the principles of force protection do overlap in these areas. For the purposes of this DASA call, it is recommended that submissions are focussed on the explicit use cases and scenarios highlighted during the launch event.
2.	Sgt Johnson - Are all of your suggestions in the URD / SRD for the CRENIC capability?	Sgt Johnson provided a written reply to this question on Slido: I am not sure. We did receive a visit from a team regarding CRENIC, where a number of my team from the training team gave pros and cons for each in service piece of equipment. It was to my knowledge they would take our advice on board regarding CRENIC. Dstl have also provided this additional comment post event: Requirements definition for CRENIC is still progress, and the UK StratCom Requirement Managers have already visited a range of ECM users including 225 Sqn as part of this process. Engagement with Users continues virtually through the COVID 19 lockdown and visits will recommence when social distance rules allow. The URD is at a very mature draft stage with Key User Requirement already endorsed by the Joint
3.	Does Dstl intend to use the DASA framework for all de-risking activities for upcoming UK ECM programmes over and above EW&C, SERAPIS etc.	Requirements Oversight Committee (JROC), chaired by Vice Chief of Defence Staff. Dstl has a range of routes it uses to engage with Industry and Academia. Dstl will continue to use EW&C and SERAPIS alongside DASA for future engagement. While it is recognised that there is a risk of 'framework fatigue' each of these has its advantages for both Dstl and participants. DASA being very open and allowing us to reach a wide audience, EW&C being better suited to higher TRL and classified work. For ECM specifically: RCLOUD, EW&C and DASA are our primary engagement routes at this time, but SERAPIS is being used increasingly in the broader EW ISTAR space by the research programmes. Further details all the on ways to engage with Dstl are available <u>here</u> . Further information is available on the frameworks listed in the question, <u>here</u> .
4	Everything seems to be aimed at disrupting the RF/RC communications. We are working on ways of identifying where IEDs are. Is this of any interest to this challenge? It could have a connection to being able to neutralise the device, or ancillary equipment.	Yes, although the presentation focused on conventional RF effects against IEDs, we are interested in non-conventional RF effects and the detection, identification and location of IEDs through the use of the RF spectrum.

5.	With the move to SDRs, are initiatives to de-risk the software environment (i.e., elements of the LCA) within the scope of this call, or what is the Authority's approach to doing this?	Development and de-risking of the LCA or its constituent elements is out of scope of this call. The Authority (MOD) will carry this out under other projects in the Equipment Plan. Proposals are assessed for their exploitation potential, which for this call will largely be via the routes set out by DE&S at the launch event. This is of increased relevance for proposals relating to techniques and technologies at higher TRLs. However, it should be made clear that LCA-compliance is not a prerequisite for proposals in this call.
6.	The new Battlefield Management App can provide an ECM SA picture as part of the SSB. To do this sensor data from across the battlespace needs to feed in to Morpheus for the BMA to "analyse" and push out to all "Platforms" - fixed/mobile HQs, vehicles, soldiers etc. Does this fall under Challenge 1?	The intention is that future ECM systems will be fully interoperable with other Defence systems and capabilities such as the Battlefield Management Application (BMA), and Single SIGINT Battlespace (SSB) and wider Single Information Environment. Along with the ECM systems themselves, these will provide many means of storing, disseminating and processing information about the RF environment which could be used to inform any solutions to Challenge 1. Therefore Challenge 1 proposals could assume some availability of this information via these systems, but it must be noted that we need to be able to operate without access to this information. It should also be noted that Challenge 1 is looking for ways to understand and exploit the RF spectrum information data that we have as opposed to how we might access or collate that data. The specifics of implementing the interoperability of these systems and capabilities falls outside of the Challenge 1 should be agnostic of the way in which they are delivered. Hence, whist the BMA may be a potential bearer of the novel analytical technical (as part of its 'analyse' function) – this shouldn't have any bearing on the development of the technique itself.
7.	For this competition, would DASA accept more than one proposal, e.g., one proposal for challenge 1 and another separate proposal for challenge 2?	Multiple proposals would be very welcome. We would advise that you ensure you have the capacity to carry out the work of all bids submitted in the event that more than one is successful.
8.	Can you provide OBC/FBC target dates for Future EOD Electronic Surveillance?	The competition team are not best placed to answer this question, please refer to DE&S SPCME Delivery team. For those based in the UK, further information can be found by completing a <u>supplier form</u> . For those not based in the UK, please email <u>accelerator@dstl.gov.uk</u> , referencing the competition in the email title.
9.	Please can you confirm my understanding of your "equipment requirement" - you want techniques and component technologies for integration with your existing equipment - you don't want new equipment, COTS in particular.	The brief from DE&S at the launch event referred to our future equipment procurements. These systems are being specified and designed around an architecture which will allow capabilities from multiple suppliers to be incorporated. We are looking for ideas and concepts which can be exploited on these future systems and are not looking for COTS equipment or modifications to our current equipment that is readily available now.
10.	This is stated in the slides but not in the online DASA pack "we are not interested in Concepts that are too immature they cannot be advanced quickly" Can you define the necessary timelines that tech would need to meet?	We are interested in approaches to the ECM problem space that are able to be integrated into or complement the future ECM requirement. To this end we are looking at concepts that can be advanced to a stage to be able to support these.

11.	Are the target prices for proposals "firm"?	Yes. As per the sift criteria in section 5.4 of the competition document, any proposal which exceeds £150K will not go through to assessment.
12.	What rates are used for submissions i.e. a company's commercial rate or QMAC?	This isn't specified. Please refer to the DASA guidance on submitting a proposal.
13.	What does the 90 mins per proposal include? Does this include the moderation? Is it per assessor, or for all three assessors?	This is 90 minutes for each assessor. The moderator will have further time to complete moderation. Each proposal will be assigned a minimum of three subject matter experts to complete assessment.
14.	What about TRL 9, Military Standard (MILSTD) Solutions? Is there room for proposing such?	For this call, this would typically be outside the scope given TRL 9 is typically COTS. There might be cases where the TRL 9 product is in a separate domain and could be applied differently to provide significant innovation in the counter IED use case which would be of interest. <u>DASA Innovation</u> <u>Partners</u> might be able to provide more specific guidance. If you consider you proposal not suitable for this call please consider other <u>mechanisms to engage</u> with Dstl.
15.	Where do C-UAS RF systems feature, are they in or out of scope as they can be used to deliver explosive threats?	As stated in the presentation there is quite a lot of blurring between these two and other similar domains. Which makes drawing a line challenging.
		The disruption of the IED component, initiation switch or the detection of the IED components would be within scope, whether in the air or on the ground. Whereas, anything that prevents that UAS system from completing its mission, and the detection of the UAS would be out of scope for this call.
		For this call, approaches that can be used across a wide range of Use Cases would be of interest.
		There are other engagement opportunities both through DASA and wider Dstl on UAS. For UAS specific solutions please consider other <u>mechanisms to engage</u> with Dstl
		Phase 2 of Countering Drones has now launched and further details can be found <u>here</u> .
16.	Regarding interfacing to the new ECM concepts. Is bluetooth now considered an acceptable interface (waveform fill etc)?	Sgt Johnston highlighted filling of equipment as an area for potential improvement, therefore proposals aimed at addressing this are within scope. However, we cannot comment on specific solutions at this stage of the call.
17	Please can you confirm if the CRENIC System Integrator will be responsible for providing equipment? Will the SI make most procurement decisions, let contracts, and supply at scale?	WITHOUT COMMITMENT. There is more information about this on the Land CEMA Architecture and project CRENIC in the latest newsletter available through the promoted link in the presentation. We are still working on our Invitation to Negotiate (ITN) proposals and the foundation of the contracts with some external legal support. The intent for the CRENIC project is to appoint a Systems Integrator (SI) partner to secure the most appropriate technology building blocks to provide a capability. Having a SI to run and administer an eco- system has the potential to provide us with more flexibility. The intent is for the SI to run the procurement process. Competitions shall be at the heart of the procurement process for the selection of technology, systems and to supply at scale to build solutions, with close involvement of the Authority overseeing the procurement route in which there may be security limitations for dealing with other nations and

18.	Can you send the link for the CRENIC sign up by email please?	technology sharing that the wider supply chain cannot manage. With regard to supplying at scale; We have specific work focused on financial aspects that will be applied to the Systems Integrator. We wish to avoid paying overhead and profits through the supply chain where there is no demonstrable value. This will not apply to the design and build of systems where there is intellectual effort. This is where the Integrator will add the benefit and the value to us. We reiterate that this remains work in progress and that aspects of this will be included in the ITN. Access can be obtained by applying <u>here</u> . Please note this portal is only open to UK Nationals.
19.	Will DASA help with collaboration by sending out a list of attendees and contact info, if agreed by attendees? We would be happy to form a collaboration partnership to speed up development through the TRLs? Is there a partner portal we can sign up to?	There is the facility to sign up to the DASA mailing list via the online portal to get information about any new competitions or other initiatives. DASA will share the details of those that gave consent on registering for the event with those that attended.
20.	Will any further security guidance be provided for this competition for proposals? There is a risk innovative ideas may be ignored or missed as the points needed to articulate the benefits may exceed OFFICIAL. We must be issued with a SAL otherwise we could submit classified information through an OFFICIAL portal. Is there a Security Aspects Letter for this project? We need to know what can and cannot be discussed with overseas subsidiaries. E.g. if a F1686 is required.	If you have previously worked with MOD on classified matters and are not clear on the Security Aspects of the information you want to be able to include in an OFFICIAL bid to DASA, please contact the original MOD customer for this work in the first instance to receive a copy of the relevant Security Aspects Letter (SAL), which should have been supplied to you under previous MOD contracts. Further support may also be available to obtain this information by contacting DASA via accelerator@dstl.gov.uk. If you have not previously worked with MOD on classified matters, please avoid inclusion of the following information, as detailed in the Launch Event slide pack: Current UK capabilities; Details of specific threat devices. Further support may also be available by contacting DASA via accelerator@dstl.gov.uk. It is recognised that requesting OFFICIAL bids makes it challenging to articulate certain details, if you are not able to describe your proposal at OFFICIAL please consider other mechanisms to engage with Dstl.
21.	Do people involved in this activity need to be SC cleared and does the organisation needs to be X- Listed?	All DASA competitions are run at OFFICIAL (not OFFICAL SENSITIVE) classification. It is not necessary for suppliers to be SC cleared to complete the competition application. If bidders/winning competitors are not already SC cleared they need to complete a Researcher's Personal Particulars form (FORM 388). Note that completing form 388 does not in itself grant you SC clearance. Any non-UK Nationals involved in the research will also need to be vetted via the Vetting Agency (this is covered on the DASA website and in our clarification emails issued to the funded suppliers). The Salesforce portal we use to receive proposals can only accommodate OFFICIAL information. Please reference this guidance, which explains more about the different levels of classification:

		Where contracts are deemed to need to be upgraded from OFFICIAL to a higher classification, these are dealt with on a contract-by-contract basis.
22.	Regarding the contribution to SSB (Steve Westwood presentation). Is there an intent for systems to exchange information with the Single Information / Intelligence Environments. E.g. interface with Morpheus EvO to contribute to the Information Advantage agenda?	Lt Col Barber, StratCom provided a written reply to this question on Slido: Yes, this is the intent and the Land CEMA Architecture contains common standards that will allow this across the SSB. Engagement with Morpheus continues to deepen our collective understanding of the opportunities therein, which are likely to be greater than just info sharing. Dstl have also provided this additional comment post event: Yes, there is a wealth of information that these systems can generate and amongst themselves we need them to talk to each other. We have no intention of putting any proprietary systems in place if Defence already has a solution; we must be integrated wherever possible. Initially that integration may be limited as many of these capabilities are still in development, but ultimately we want ECM to be a seamless part of wider Defence information capabilities such as the Single Information Environment. We need to participate in wider initiatives as both a producer and a consumer of information so we can make use of anything relevant that is out there to enable us to undertake the ECM mission effectively. This goes for all scales, we want to apply this as appropriate whether it be across the systems on a single platform, those connected via Tactical CIS or interoperability with Defence-wide information capabilities.
23.	Will more 1-2-1 sessions be made available, 9 is not a significant amount?	Due to the high demand, further appointments were made available bringing the final total to 27 slots. Unfortunately, there is no further scope for more slots to be added. Further support may be available by contacting DASA via accelerator@dstl.gov.uk or by contacting your <u>regional</u> <u>innovation partner</u> .
24.	Who will be on the line on the DASA / Dstl side for the one to one meetings?	Presenters from the DASA Launch Webex, along with suitable Dstl experts that, supported the launch event but weren't part of the presentation team.
25.	Why "on the platform" analysis - the logic is flawed. E.g. why not have a UAV with sensors providing a CEMA picture and pushing real-time ECM SA out to the platforms on the ground. Don't constrain innovation otherwise what is the point of this DASA call?	'On the platform' could mean an individual soldier, a vehicle, a formation of troops. The main thing we are looking for is capabilities to support the deployed user in as close to real time as is achievable If your proposal needs massive offline analysis and is dependent on the ability to transfer large data sets it probably doesn't support this specific DASA call. If however, there is something that really could support this requirement then we are genuinely interested to hear it.
26.	Typically technique developments such as described in Challenge 2 have been at higher security grading. How is it planned to handle this on Invisible Shield?	 For this call we were very keen to reach out widely to the subject matter expertise within the community in industry and academia; DASA is an ideal platform to achieve this due to the fact that it operates at OFFICIAL (akin to UNCLASSFIED). Bids submitted to DASA must be OFFICIAL and not OFFICIAL SENSITIVE or higher. As per the launch event slide pack, please avoid including the following; Current UK capabilities and operations, Defence capability gaps or vulnerabilities, Details of specific threat devices. There is opportunity to raise classification queries with DASA and in the 1-2-1 sessions.

		There may also be the opportunity to conduct work and tasks at higher classification, once proposals have got through the approval process.
27.	Are Use Cases available?	We will not be providing any further use cases beyond that which we have already provided in the competition documents and launch event slide pack. However, we are interested in a variety of techniques for use with a multitude user roles and requirements.
28.	Are there any locations in the UK where you are able to field test ECM?	We will expect everyone to comply with current UK legislation. Anybody conducting over the air RF transmissions must comply with the wireless telegraphy act of 2006, in particular sections 8 and 68. This states it is illegal to conduct jamming or interference deliberately with wireless telegraphy. This means for non-government personnel there is no way at the moment of legally conducting RF jamming field trials in the UK. There is however an initiative that Dstl are supporting by the University of Aberystwyth and QinetiQ; The National Spectrum Centre, that will hopefully enable some of these jamming type RF activities in the future.
		Further information can be found on the Ofcom website; <u>here</u> and <u>https://www.ofcom.org.uk/spectrum/interference-</u> <u>enforcement/spectrum-offences/jammers</u> .
		N.B. Other legislation also covers ECM type Equipment such as the Police Act 1997, Computer Misuse Act 1990, and
29.	We have an idea / concept which spans a number of Challenges. How should we proceed?	Investigatory Powers Act 2016. For this competition, each challenge will be assessed independently so it is better to submit multiple bids which focus on the specific requirements of each Challenge. Where multiple bids are submitted please make sure all submissions are able to stand on their own merits.
30.	We have an idea for meeting one of the Challenges which could develop on a novel hardware system. Is this in scope?	The Challenges are primarily focused on developing, de- risking and demonstrating new ideas and concepts as opposed to hardware systems. Future systems (as briefed in the DE&S presentation) are being designed around an approach / architecture which will allow us to exploit concepts and techniques from a range of suppliers. Ideas and concepts may need to be hosted on a hardware platform (e.g. SDR) for development/demonstration but development of this hardware should not be a significant part of the proposal. Some hardware technology proposals may be suitable for Challenge 3. Please see the answer to the question below.
31.	We have a novel hardware system which we wish to develop for Challenge 3. Is this in scope?	The challenges are primarily focused on developing, de- risking and demonstrating new ideas and concepts as opposed to complete hardware systems. If your proposal is hardware based it should clearly articulate the S&T challenge it seeks to address, how it achieves a step change beyond existing commercial technology and, crucially, why this is of benefit to ECM.
32.	Are bids requesting smaller funding, or shorter duration, than the maximum acceptable?	Yes we are open to bids requesting less money than the maximum specified and will allocate funding accordingly. This will factor in to the value for money category of the assessment and selection process.
		We are also open to bids requesting less time than the maximum allocated.
33.	Do you have any concerns with technologies which may involve ITAR restrictions (or other export controls)?	We would like any export restrictions for this proposal or future exploitation to be highlighted in the bid to ensure that this is understood by the assessors. The impact of these restrictions would need to be considered on a case by case basis,

		although one of the key aspects we are keen to address is maintaining our freedom of use for the technology we are funding. Please refer to section 5.2 of the competition document.
34.	Do you require a letter of support from stakeholders/users?	These would be applicable to support a user need that we are unaware of, we already know there is a need for ECM. You are more than welcome to provide them, but this is not a requirement.
35.	My idea doesn't fit in to your call but shows benefits to defence and security?	If an idea does not meet our requirements, we would encourage you to submit to the DASA open call. Please <u>contact</u> an Innovation Partner for guidance on the best route.