

| Question | Date: | Answer |
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| 1 In order to prepare the requested options, is a site visit to Yeovilton and Merryfield to be offered during the bid phase? | 19/08/2020 | We will not be offering a site visit to Yeovilton and Merryfield as this option if taken will be a replication of the solution delivered at RNAS Predannack and RNAS Culdrose |
| 2 Can you provide an explanation of the purpose and function of Command Light Signals (ITT Para 13, Requirements table, Options). | 19/08/2020 | Attached a link to CAP 637 which details at Chapter 6 and Table D the purpose of Command Light Signals. |
| 3 Can you confirm if the £8.5Mil proposed budget is inclusive of the £1.7Mil POC budget or is it £1.7Mil plus £8.5Mil? | 19/08/2020 | The 8.5M budget is inclusive of the entire potential contract spend if all options are taken up. The 1.7M is included in that figure and is the available budget for the proof of concept and delivery and first year maintenance at RNAS Predannack and Culdrose |
| 4 Are technical drawings and descriptions for the four airfields available (to include ATM and airfield power and wiring)? | 19/08/2020 | The Authority does not believe that this level of detail is required at this point in the process. Greater detail will be available at contract award. |
| 5 DEFCON 658. Para 45 of the Terms & Conditions refers to DEFCON 658 Edition 11/17. The Defence Gateway lists Edition 10/17 as the latest version and we cannot find any links to 11/17. Can you confirm that 10/17 is the correct version of DEFCON 658 for this tender? | 19/08/2020 | Apologies – this is an error. The correct edition is 10/17. |
| 6 could you please clarify the deadline date for the delivery of the system? In schedule 9 the delivery date is 31.12.2020, whereas in schedule 2 it is written “Delivery Date (estimated dates to be confirmed on contract award)” | 20/08/2020 | Apologies the header on the delivery date column on Schedule 2 should have been clearer. The deadline date for delivery and installation at Predannack/Culdrose is 31st December 2020 - however the delivery dates for the options will be firmed up with the successful supplier once the decision has been made on whether these will be taken up. |
| 7 are you able to confirm that for each site, the infrastructure and available networks will be GFX and that it will be sufficient to support the electronic exchange of data between Predannack, RNAS Culdrose and all the other sites that the tender invites us to quote for? | 20/08/2020 | The infrastructure and networks will be provided as GFX. We are unable to answer the second part of the question at this stage as the Authority does not know what the requirements of the proposed solution are. |
| Site Visit - RNAS Culdrose and RNAS Predannack - 24/08/2020 | | |
| Intro session | | |
| 8 Is there any ducting at Predannack? | 24/08/2020 | The IT connectivity at Predannack is limited. There are phone lines, a node into BT at the Predannack Tower. There is limited capacity to add to to this due SSI. There is potential to lie underground cabling noting there is SSSI which will limited the ability to do so. |
| 9 Is there any underground ducting at the end of the Predannack runway? | 24/08/2020 | There is no SSR at Predannack. There will be some ducting at the end of Culdrose, but the state of it is unknown. |
| 10 Can we get diagrams of current ducting, power access and voltage layout? | 24/08/2020 | Yes - we will provide that in terms of ducting but we would expect the supplier to provide details on their required loading capacity and judge if we have sufficient capacity. |
| 11 What is the Radio connectivity between Predannack and Culdrose? | 24/08/2020 | Then Predannack radios are standalone units but Culdrose has the ability to access the frequency used to communicate between Predannack tower and aircraft. The transmitter is located midway between the two sites |
| 12 Do you fly fast jets at Predannack? | 24/08/2020 | No we don't fly fast jets at Predannack we fly manned rotary wings, UAS, and Gliders. |

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| 13 | Is gliding activity in scope? | 24/08/2020 | Gliding takes place outside Rotary Wing flying at Predannack - however the ability to see any arial activity in the Predannack Military Aerodrome Traffic Zone is integral to building the ATCO's Situational Awareness. |
| Server Room - Culdrose Tower | | | |
| 14 | What are cabinets in here contain? | 24/08/2020 | BT Servers, Modnet Servers, Thales network |
| 15 | Will the CCTV server for the remote tower be located in here? | 24/08/2020 | This would be the best room available as it is air conditioned and secure. The feeds would need to be routed to the monitors |
| 16 | What is the distance from here to the operations room and how much trunking would we require? | 24/08/2020 | Vertically it is around 20 Ft but you would need 100ft for the trunking |
| 17 | Is there any restrictions on extra rack space in here? | 24/08/2020 | This would be dependant on SCIDA. |
| 18 | Is the floor concrete. Would there be any loading issues? | 24/08/2020 | Yes - there will be no loading issues |
| 19 | In terms of security are you seeking compliance to JSP 604 even at Proof of Concept stage? | 24/08/2020 | Yes - and also to JSP 440 and SCIDA. This is due to the intention of rolling out across the other optional sites if successful at Proof of Concept and the need to build a robust safety case to enable this. |
| 20 | Is there sufficient power in the Server room? | 24/08/2020 | Yes - there is 240 V to all cabinets |
| 21 | Have you got sufficient HPAC capacity | 24/08/2020 | Awaiting clarification. |
| 22 | What is the capacity of the trunking? | 24/08/2020 | Awaiting clarification. |
| 23 | Is the RXTX/RTX just for Culdrose? | 24/08/2020 | Awaiting clarification. |
| 24 | Is there MODnet at Predannack? | 24/08/2020 | Yes - in the tower |
| Radar Room - Culdrose Tower | | | |
| 25 | Would this be a potential space for display screens? | 24/08/2020 | Yes it is. |
| 26 | Would this room usually be fully manned with all seats taken? | 24/08/2020 | No - usually about 3/4 seats spare. |
| 27 | Does the cabling run under the floor and where are the servers for this room? | 24/08/2020 | Awaiting clarification. |
| 28 | Is this the way the room is usually lit? | 24/08/2020 | Yes |
| 29 | Would it be possible to block the secondary entrance/exit door? | 24/08/2020 | Probably there are no fire restrictions |
| Admin/Flight Plan - Culdrose Tower | | | |
| 30 | Do you have a slave repeater in the VCR? | 24/08/2020 | Yes - There is no ATM radar/radar picture at Predannack |
| 31 | Would a complete takeover of this room be possible | 24/08/2020 | Currently used for flight planning but potentially we could offer this room and find other spaced for this activity. Furniture could possibly be removed but we may need to continue storing some items in here. |
| 32 | Is this a solid floor? | 24/08/2020 | Yes |
| VCP - Culdrose Tower | | | |
| 33 | Is the long-term aim to move the Remote Tower into the VCP? | 24/08/2020 | Aspiration is for the remote tower picture to be located in the VCP tower at Culdrose because as we want to look a multi-mode operations. This would reduce the need for manning Predannack tower however it would not be appropriate to run the trial in an operational environment. |

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| 34 | Does Predannack do night flying? | 24/08/2020 | Yes |
| 35 | Does Predannack have aerodrome lighting? | 24/08/2020 | Predannack does not have permanent aerodrome lighting but there is a deployable lighting system used for night flying. |
| 36 | Is the temporary lighting solution NVG compatible? | 24/08/2020 | The temporary lighting system is MOSKIT which can be set out for night flying and has a minimum setting which can be used for NVG (Night Vision Goggles). There are obstruction lights on the masts on the Predannack VCP, the MET Radome and 626 Gliding Club Hangar, there may be others. Some are selected with a switch in the VCP, some come on automatically. |
| 37 | Is the June 2021 you would like to see the RT moved up to the Culdrose VCP? | 24/08/2020 | Yes |
| 38 | Do you have line of sight from Culdrose Tower to Predannack | 24/08/2020 | Yes. You cant see the deck at Predannack however you can see aircraft lift off. You cannot see the Predannack tower. |
| 39 | Could you control the Predannack circuit from here? | 24/08/2020 | Awaiting clarification. |
| 40 | Is there fire cover at Predannack when flying? | 24/08/2020 | Yes - two fire crews are required if there are more than one aircraft flying. Fire crews are shared between the sites |
| 41 | Do the current certification allow ATCOs to press the crash button at Culdrose end for an incident in Predannack? | 24/08/2020 | The crash alarm for Predannack is located in Predannack Tower. The DATCO at Culdrose does not have a direct crash alarm to the crews located at Predannack. The DATCO at Culdrose will pipe a State Three emergency for Predannack emergencies to allow for additional services if required. |
| 42 | Have you ever had F35 land at Culdrose? | 24/08/2020 | No and they wont land here due to security classification. We do have 3 x F35 1 x Harrier models for manoeuvring practice. |
| 43 | Is there a secondary system to Frequentis? | 24/08/2020 | There are stand alone emergency UHF and VHF radios. |
| 44 | Are the VHF UHF radios standalone? | 24/08/2020 | Yes - they are standalone units. |
| 45 | Is there an uninterruptable power supplier to the entire building? | 24/08/2020 | Yes - there is stand by generator available |
| 46 | What comms are there between the Culdrose tower and runway caravan? | 24/08/2020 | The main forms of comms are Two possible phone lines, mobile phones, UHF VHF and Orca ground management system. |
| 47 | Is the caravan a standalone system? | 24/08/2020 | Yes - it has mains power connectivity and backup generator |
| 48 | What is the purpose of the caravan in normal operations? | 24/08/2020 | It is used for Fixed Wing last look checks on take off and departure and all other aircraft whilst Fixed Wing operations are taking place as it is in situ. |
| 49 | Does the caravans have their own light signals? | 24/08/2020 | yes there are two roof mounted pistols - one red one green. A third pistol is available if required. |
| 50 | Is there a caravan at Predannack? | 24/08/2020 | No |
| 51 | Do you move the caravan? | 24/08/2020 | It is always at the approach end of the runway. It is mainly used for fixed wing flying on runway 29/11. The other runways are too short for a caravan. |
| 52 | Does Culdrose always use single runway operations? | 24/08/2020 | Fixed Wing operated to 29/11 but there can be concurrent Rotary Wing operations to the other runways e.g. General Handling/Winching Manoeuvres. |
| 53 | Do Culdrose circuits always run in particular direction? | 24/08/2020 | Yes - generally away from Helston. |
| 54 | What legacy system is used for controlling the lighting panel? | 24/08/2020 | There are airfield fibre optic cables (underground transformers are required.) Brilliancy is adjustable the RA's specify the exact requirements.) |

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| 55 | Is there a requirement for MET at Predannack? | 24/08/2020 | Yes - Local observations only available when the tower is manned. These are conducted b RN staff. |
| Predannack Tower - VCP | | | |
| 56 | Is the tower structure viable? | 24/08/2020 | Temporary repairs have been made to the VCP with a maximum lifespan of 3 years. VCP/ top layer of the tower will be removed but the rest of the building will be retained if possible. |
| 57 | Where do you foresee the concrete plinth going? | 24/08/2020 | On the north side of the tower within the tower fence line. Power comes in from the west. |
| 58 | Will there be any new regulations to follow? | 24/08/2020 | Conversations with the MAA are ongoing. The release to service process is unchanged. The guidance is to follow the current regulations at present. The MAA will advice if this changes. |
| 59 | Which way does the Predannack circuit move? | 24/08/2020 | It is dependent on which runway culdrose is using. It is either around Goonhilly or out via Loe bar and down the coastal route |
| 60 | Which areas of the airfield are used the most often? | 24/08/2020 | The grey shaded areas on the crash map. |
| 61 | Does Predannack run UAV and manned flights concurrently? | 24/08/2020 | Not currently |
| 62 | What is the radar next to the tower? | 24/08/2020 | This is the MET office radar |
| 63 | do we need permission to install equipment onto this tower and/or erect masts on site? | 24/08/2020 | We do not need permission to affix equipment to the tower. Masts would need planning permission but this would be requested after the event and they would have 30 days to appeal. |
| 64 | How is power supplied to the site? | 24/08/2020 | The only power on site comes in from the East past the MET office radar and enters at base of the tower and out to the hangers. The Culdrose power also enters at the base of the tower from adjacent HV substation. |
| 65 | Is it possible to use the UHF/VHF radios from Culdrose? | 24/08/2020 | If this refers to UHF/VHF from Culdrose we can transmit from these but they are not currently assured at the moment. If it is regarding transmitting from the antenna situated at Predannack from Culdrose then this is not currently possible. |
| Site Visit Day 2 | | | |
| The Tamar Room | | | |
| 66 | How many sets of workstations or screen do you ultimately require (including options)? | 25/08/2020 | We are seeking proposals from suppliers our requirement is outlined in the Invitation to Tender and it is ultimately up to the supplier to put forward a proposal to achieve this. |
| 67 | Are you looking for one ATCO to manage multiple airfields? | 25/08/2020 | That is our ultimate aspiration. We are learning and looking to work with the supplier to develop a solution. We are working closely with the CAA and the MAA from a regulatory perspective. |
| 68 | Is Predannack all VFR and aerodrome services? | 25/08/2020 | Yes |
| 69 | Are you looking for fog and snow cover? Do you want an infrared camera solution in addition to a standard visual camera solution? | 25/08/2020 | It is up to suppliers to specify their proposed solution in their tender proposal. |
| 70 | Would you accept infra red only solution? | 25/08/2020 | We will consider your suggestions. We need to be able to assure our situational awareness. The digital solution should be no less safe than our current solution and preferably safer. |
| 71 | Safe enough - is this adequate terminology? | 25/08/2020 | The proof of concept is to help us develop a safety case and help provide evidence to the regulators. We would like to demonstrate that the equipment works and is as safe or safer than the current solution. |
| 72 | Do you currently use night vision? | 25/08/2020 | No |

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| 73 | What bandwidth is available between Predannack and Culdrose? | 25/08/2020 | Awaiting clarification. |
| 74 | Are you looking for 360 degree to 2000 ft visual coverage at Predannack? | 25/08/2020 | A full 360 degree view with the vertical plane sufficient to discharge Air Traffic Services safely. |
| 75 | Are we looking at air space control and runways too? | 25/08/2020 | We are seeking a solution for control of the visual circuits and general handling on the airfield. Given the dynamic nature of the airfield there is a requirement to have sight of all areas of activity, replicating the current OOW view. |
| 76 | Do you know how you want the 360 degree view displayed on screens? | 25/08/2020 | It's for the supplier subject matter experts to make suggestions/recommendations based on their knowledge and experience. |
| 77 | Do you need hot spot camera or just a 360 degree view? | 25/08/2020 | A 360 degree view is sought but it is reliant on the supplier to determine the construct of the camera array to achieve this. |
| 78 | I assume you have Nav aids and SSR. Have you got WAM and any other Nav Aids? | 25/08/2020 | PSR and SSR |
| 79 | The SOR mentions Project Marshall, but does not specify any integration deliverables. Is this intentional? | 25/08/2020 | It is an assumption. It should be understood that the successful contractor will need liaise/integrate with Project Marshall. The equipment is managed by Project Marshall so they will need to be engaged. The cost of any integration will be met by this project not Project Marshall. |
| 80 | There is a requirement for maintainer trainer. Will this be Aquilla? | 25/08/2020 | Maintainer trainer is not part of the initial requirement. |
| 81 | Will the new SSR be available for this requirement as GFX? | 25/08/2020 | Awaiting clarification. |
| 82 | Is the Culdrose SSR coverage available at Predannack? | 25/08/2020 | To a degree it is. |
| 83 | Is there runway lighting at Predannack? | 25/08/2020 | No permanent lighting. |
| 84 | Is there a local SCIDA representative? | 25/08/2020 | There is a Navy representative in Plymouth. Scida will attend when required. |
| 85 | Will there be air conditioned rooms available for the display equipment and plant room for servers/equipment? | 25/08/2020 | Yes - these will be available for view on the site visit |
| 86 | Are SCIDA adamant about their cabinet space? | 25/08/2020 | Yes - We were looking to get some of the equipment removed from the Predannack plant room for Project Marshall. We would suggest that a wall mounted solution might work best. |
| 87 | Is there any asbestos at Predannack tower? | 25/08/2020 | Yes there is. All 'known' Asbestos is checked for condition annually. The known Asbestos are, Room 105 – Toilet Cistern – Amosite Room 001 - Toilet Cistern – Amosite This survey wasn't intrusive. |
| 88 | The ITT does not specify what is required with regards to gold/bronze maintenance/support solution deliverables - do you want suppliers to make assumption and recommend best appropriate level of cover? | 25/08/2020 | Yes |
| 89 | Will siting boards be an issue? | 25/08/2020 | No we will make these happen. |
| 90 | Do you want remote flare guns? | 25/08/2020 | Awaiting clarification. |
| 91 | In the ITT there is a requirement for AAOS certification. Would you accept alternatives? | 25/08/2020 | If suppliers think they can achieve AAOS approval in time for PoC and can show evidence then it would be considered. |

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| 92 | In the ITT there is a requirement for NATO SC clearance. Would you accept an alternative? | 25/08/2020 | Awaiting clarification. |
| 93 | Combining different airports in the future - will this all happen at one time? | 25/08/2020 | We are open to look at this. It is about efficiencies and ensuring safety is of paramount importance. |
| 94 | How many aircraft movements are there a day? | 25/08/2020 | Culdrose recorded 22,750 moves for the year 2019. |
| 95 | Can the proof of concept be something that would work at Predannack but not necessarily be the full final solution? | 25/08/2020 | Yes as long as it is scalable |
| 96 | Do you have many amateur drones operating at Predannack? | 25/08/2020 | No - only one incident in 3 years. Our sites are no-fly zones/ dead zones. |
| 97 | How many ATCs do you have? | 25/08/2020 | We should 28 plus a SATCO but we have been currently operating with less. |
| 98 | Is Project Marshall independent to the ATS solution besides the integration piece? | 25/08/2020 | Yes |
| 99 | In respect to operations at Culdrose what is the peak range of aircraft numbers? | 25/08/2020 | Awaiting clarification. |
| 100 | Would you look at a solution with no visual feed at all? | 25/08/2020 | We wouldn't discount it. ATC's may be reluctant to move to system with no visual feed as this far removed from the current situation. Safety may be a concern here and it may prove more difficult to get regulatory approvals. |
| 101 | Has anyone in the project have experience of taking a project through the MAA regulations certification process? | 25/08/2020 | Yes - Cdr Lippitt |
| Culdrose Tower - Server Room | | | |
| 102 | Where are the risers? | 25/08/2020 | In the room next door an the ducting for it is on the far wall. |
| 103 | Does it get hot in here? | 25/08/2020 | No |
| 104 | Is every cabinet in use? | 25/08/2020 | 4/5 in use |
| 105 | Are plans of this building available? (e.g. SCIDA plans with ducting marks?) | 25/08/2020 | Awaiting clarification. |
| 106 | Is the installation of equipment GFX or the responsibility of the contractor? | 25/08/2020 | Installation of the equipment the responsibility of the contractor. |
| 107 | What is the lead time on electrical services? | 25/08/2020 | 2 weeks on averages but dependant on the job and timings. |
| Culdrose Tower - Radar Room | | | |
| 108 | Is this a potential space for the Proof of Concept display fit? | 25/08/2020 | Yes |
| 109 | Does it get hot in here? | 25/08/2020 | Yes - there is a potential possibility that the air con will be turned off in that room as no longer fit for purpose. |
| 110 | Would you upgrade the air conditioning as part of this requirement? | 25/08/2020 | No - not in scope. |
| 111 | Do we need to deconflict Predannack and Culdrose? | 25/08/2020 | Culdrose is always open when Predannack is. Predannack operates 12 hours a day - 4 days a week |
| 112 | Do you see this room as being ideal for the remote tower? | 25/08/2020 | This is dependant on the solution and space requirement. |
| 113 | Is there an electrical distribution box for this room. | 25/08/2020 | Yes |

| Culdrose Tower - Flight Planning room | | | |
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| 114 | Is this a possible solution for siting the remote tower? | 25/08/2020 | This is a resilience space for other areas of airfield activities but potentially. |
| 115 | Would your contractors be responsible for any infrastructure work in here as GFX? | 25/08/2020 | Amey is currently the prime contractor. |
| 116 | Who is AP electrical for Culdrose? | 25/08/2020 | Kevin Rothwell (DIO) |
| 117 | Is there asbestos in the Culdrose Tower? | 25/08/2020 | Yes there is, it is a small amount in the lift braking system and internal lift motor which is identified as a blue risk on the asbestos register. |
| Culdrose Tower - Briefing room | | | |
| 118 | Is this a potential space for the Proof of Concept display fit? | 25/08/2020 | There may be resistance from the command for using this space |
| 119 | Is there any reason not to use the Radar room for the display fit? | 25/08/2020 | It has definite benefits |
| Culdrose Tower - VCP | | | |
| 120 | Is the view in here 360 degrees to 2000 ft? | 25/08/2020 | 360 degree is required with a vertical plane appropriate to discharge Air Traffic Services safely. |
| 121 | Would a microwave shoot between Predannack and culdrose tower be possible? | 25/08/2020 | Potentially |
| 122 | How many people are usually working up here? | 25/08/2020 | 2 ATCOs plus DATCO and a logger. |
| 123 | Do you use all of the runways at Culdrose? | 25/08/2020 | Yes - 29/11 primarily for fixed wing and the rest are for rotary wing helicopters. |
| 124 | If you are looking at remoting this VCP (Culdrose) to another airfield what else would you look to want to control? | 25/08/2020 | All aerodrome lighting, traffic lights and possibly barriers on the main runway. |
| 125 | Will your Geo screens be replaced by TOPSKY? | 25/08/2020 | Yes |
| Predannack Tower | | | |
| 126 | Where do the power and BT lines comes into the site? | 25/08/2020 | All within the tower compound |
| 127 | Do you fly fixed wing from Predannack? | 25/08/2020 | No - and we restrict landing to the north end. Gliders do land but the airfield is closed when they are flying |
| Predannack Tower - VCP | | | |
| 128 | Are there 2 working positions? | 25/08/2020 | Yes - 1 control and 1 assistant |
| 129 | Where is the anemometer? | 25/08/2020 | On the south mast. |
| 130 | How does the operation work? | 25/08/2020 | The focus is on flying circuits. Winch spot 3 is used the most. We do not land due to surfaces. |
| 131 | When traffic comes in can it come from any direction? | 25/08/2020 | Its mostly routed around Goonhilly or via Loe Bar. Dependant on the Culdrose runway being used. |
| 132 | Do you track aircraft along the coast or are you only interested in visuals of the aircraft within Predannack? | 25/08/2020 | There is an information flow between the radar room and the towers. The radar room will advise of the approach and direction of travel. |
| 133 | Do you try and maintain visual contact with aircraft in the pattern? | 25/08/2020 | We try to maintain visual contact with aircraft in the pattern. |