

Question	Date:	Answer
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	<a href="#">Attached a link to CAP 637 which details at Chapter 6 and Table D the purpose of Command Light Signals.</a>
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 and training deliverables. See also question 191.
4 Are technical drawings and descriptions for the four airfields available (to include ATM and airfield power and wiring)?	19/08/2020	At present there are no assured technical drawings available. The authority is currently undertaking limited site survey for PDK/CLD; however, the results of these will only be available after the award of contract.
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 01 February 2021 - 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	Where possible, GFX may be provided if spare capacity exists under a best endeavours basis. The authority does not accept any liability for non availability, lack of capacity or connectivity. Suppliers must ensure the solution is inclusive of the connectivity requirement to discharge the overall SoR.
<b>Site Visit - RNAS Culdrose and RNAS Predannack - 24/08/2020</b>		
<b>Intro session</b>		
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 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.
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.
<b>Server Room - Culdrose Tower</b>			
14	What are cabinets in here contain?	24/08/2020	BT Servers, Modnet Servers, Thales network. There is a full-sized, legacy NAVYNet cab supporting a 2U FOPP. That cab could be removed, floorspace reutilised, on understanding that the FOPP would be relocated if it is needed for Station connectivity/ BCP.
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	See entry 14
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. Project would need to know cabinet electrical loading; location of electrical JoM and connection back to bldg MDB.
21	Have you got sufficient HPAC capacity	24/08/2020	It is believed that this is relating to HVAC capacity. There is sufficient HVAC for the existing loading. Until the requirements of the proposed solution is known the calculation can not be completed.
22	What is the capacity of the trunking?	24/08/2020	The Tower has various sizes of trunking ranging from 25mm to 100mm in diameter.
23	Is the RXTX/RTX just for Culdrose?	24/08/2020	Predannack transmitter/receivers are in the tower and specific to the tower.
24	Is there MODnet at Predannack?	24/08/2020	Yes - in the tower
<b>Radar Room - Culdrose Tower</b>			
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	Short length of 25mm Round trunking under the floor to the MODNet port location in the Radar Room. IT Cabinets are located in room G11, next to Ground Radio.
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. From SCIDA perspective they would need access to the RH wall as it offers access to Dist Bd and MODNet trunking
<b>Admin/Flight Plan - Culdrose Tower</b>			
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
<b>VCP - Culdrose Tower</b>			
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. Culdrose VCP space will impacted due to the Thales MASIM requirement.
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	The visual range and detail is not sufficient to adequately provide ATM services to aircraft conducting approaches to PDK from the CU VCP.
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 he 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.)

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 by RN staff.
<b>Predannack Tower - VCP</b>			
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 advise 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 but would be subject to a Siting Board to ensure that every Safeguarding issue is presented. 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.
<b>Site Visit Day 2</b>			
<b>The Tamar Room</b>			
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
73	What bandwidth is available between Predannack and Culdrose?	25/08/2020	BT Line and BT service delivery point in both PDK and Culdrose. The lines between are owned by BT. The current bandwidth is unknown however work is being undertaken by a different project to bring it to 100mbps for their requirement - the supplier should not assume that this is available for use on this project - however it should indicate to the supplier that there is a route to uplift bandwidth if required.
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	There is not a requirement for maintainer training. This is in the excel spreadsheet in error. The bidder will be required to provide the engineering services and maintenance/logistics plan to support the equipment, with an agreed Junction of Maintenance, not only between them and Aquilla, but also between them and DIO/Amey/BT and other utility suppliers.
81	Will the new SSR be available for this requirement as GFX?	25/08/2020	The new SSR will be available for this requirement as GFX subject to the system compatibility.
82	Is the Culdrose SSR coverage available at Predannack?	25/08/2020	To a degree it is. We will have coverage charts for the equipment that Marshall is installing that we should be able to make available.
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	Siting Boards will be enabled
90	Do you want remote flare guns?	25/08/2020	This is not a requirement.
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. Amended to now read 'The supplier does not have to be AAOS approved at contract award on the provision that they have engaged with the MAA, been briefed on their AAOS responsibilities and can show that they are on a recognized 'Route to Approval'.

92	In the ITT there is a requirement for NATO SC clearance. Would you accept an alternative?	25/08/2020	SoR – 86 states that "The Supplier shall provide personnel cleared to handle information classified to Official Sensitive ". JSP 440 leaflet 7 – Personnel Security states that a BPSS is an appropriate level to view Official information and in fact personnel with this clearance can have limited, supervised access to SECRET. It is agreed that a BPSS would be an appropriate level of clearance.
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	Approximately, but not limited to, 8 air systems, 2 circuits with 4 air systems in each circuit.
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
<b>Culdrose Tower - Server Room</b>			
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, not with the current loading.
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	Not available
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.
<b>Culdrose Tower - Radar Room</b>			
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
<b>Culdrose Tower - Flight Planning room</b>			
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.
<b>Culdrose Tower - Briefing room</b>			
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
<b>Culdrose Tower - VCP</b>			
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. TOPSKY is the eventual replacement in accordance with the MARSHALL rollout.
<b>Predannack Tower</b>			
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
<b>Predannack Tower - VCP</b>			
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.
134	Are there current telecoms networks/datalinks (including MODnet) available between Culdrose and Predannack that can be utilised for Remote Video? Is the network secure and therefore need a firewall. What bandwidth is available to be used if available	03/09/2020	There are telecoms networks/data links between Culdrose and Predannack but the suitability and capacity for remote video is unknown at the moment. The supplier responses should include appropriate solutions to the JSP 440/JSP604 compliance. Bandwith is currently unknown.
135	Will the data links between sites be expected to be provided by the Remote Towers supplier or will these be provided by MOD?	03/09/2020	The supplier is requested to provide a solution that ensures that the data collected at PRDNK can be appropriately transferred to CULD, adhering to the standards (JSP/DefStan) supplied in the ITT/SoR. If current links are deemed appropriate with no detrimental effect on current services they may be available for use, but suppliers should not assume this.
136	Can you advise whether a fibre network is available at Culdrose request for details	03/09/2020	There is a fibre network (MODNet) at Culdrose. Project Marshall and DBI have used spare bandwidth on this network to route their data around the site. Dependant on the availability of spare fibres this may be able to be utilised for the Digital Tower project, however an assessment would need to be made on the amount of data being transferred and whether this would have an adverse impact on MODNet. I would suggest that installation of fibre connectivity between the tower and the main BT exchange (which are at the same end of the site) should be included in the suppliers quote.
137	Are Comms Tx and Rx expected to be at Predannack or is it viable to use comms at Culdrose to provide sufficient Comms coverage at Predannack?	03/09/2020	The comms fit at Cu can be used for the PoC. For the enduring solution there may be a requirement for additional work to be undertaken by MoD to future proof the requirement.

138	Can MOD share the upgrade schedule for RNAS towers	03/09/2020	There are no scheduled upgrades for the ATC Towers at either CU or VLN.
139	What is the expectation on voice recorder and replay, any integration with RADAR and combined replay of this with Remote Tower visuals?	03/09/2020	Not knowing how the future regulations regarding record and replay will develop, the current requirement is for the visual picture displayed to the ATCO is recorded and can be replayed. The frequencies are already recorded and retained under a separate system. The two should be tied and linked with date time stamp alignment.
140	What MET Systems already exist at Predannack and Culdrose. Is this expected to be integrated into the Remote Tower solution? What format is the MET data available and can an ICD be provided	03/09/2020	<p>PDK has an anemometer, which the PDK ATCO has a readout for and so provides them the wind speed and direction. This equipment is maintained by UK Met Office Exeter. The solution would need to integrate this information to be displayed to the PDK controller. Culdrose has the following instrument configuration:</p> <p>Thermometry:  Ordinary – screen temp +</p> <ul style="list-style-type: none"> <li>• Min temp</li> <li>• Max temp</li> <li>• Grass</li> <li>• Astro turf</li> <li>• Concrete</li> </ul> <p>Humidity sensor  Rain gauge  Sunshine recorder  Present Weather Sensor  Snow Depth sensor  Laser Cloud Base Recorder  Visibility Sensor  Pressure Sensor  Wind speed  Wind direction</p> <p>Culdrose data is currently displayed at Culdrose Met Office using the Met Monitoring System (MMS). This is soon to be replaced by a web based service called SurfaceNet. SurfaceNet will be hosted in the cloud and be more accessible in the future.</p>
141	When is the SSR Upgrade under Project Marshal by Aquila expected to be complete for Culdrose?	03/09/2020	The work for the upgrade has already started and the current understanding is that it will be completed by Dec 21. The Programme currently believe that they are slightly ahead of schedule and the forecast/anticipated SSACB date is May 21 with the WEP SSR following shortly thereafter (currently forecasting Jun/Jul 21). Therefore, By summer next year CUL should be receiving both CUL & WEP SSR feeds integrated into the legacy Cobham RRC and RDP systems.

142	Will all aircraft using the sites be Mode S capable on completion of the SSR upgrade?	03/09/2020	the Hawk T1 that 736 RNAS operate from Culdrose do not have a compliant transponder that will result in some non-detection on Mode S systems. We have only really seen this with WAM and not co-mounted equipment as we have not had this to test as of yet. The Hawk TAA has a plan in place to upgrade these transponders over the next few years. Other aircsystems should be Mode S capable.
143	Is an ICD for the RADAR and SSR available?	03/09/2020	This will be made available to the supplier within an integration agreement with Aquila.
144	Can the ICD be provided for the AGL	03/09/2020	This is not available
145	Is there existing Data connectivity provided at the Runway Caravan locations(s)?	03/09/2020	There is no known data connectivity provided at the runway caravan locations.
146	Is there existing power connectivity provided at the Runway Caravan locations(s)?	03/09/2020	There is existing power connectivity at the Runway Caravan locations
147	Does MOD use approved/preferential civil works/local contractors that suppliers should be aware of including crane and plant hire equipment(s)?	03/09/2020	No, standfast should there be a requirement to connect into exisiting services/infrastructre then there is a requirement to engage through DIO for appropriate approvals/agreements.
148	How is Runway in use Distributed currently?	03/09/2020	Unsure of the question but in terms of how the runway in use is promulgated to the aerodrome users it is done in a number of ways such as main broadcast pipe on airfield opening, on the airfield status board which each squadron has access to, it is also given to the aircraft by the controller as part of the circuit joining calls.
149	Provide the current asbestos survey of Culdrose and Predannack	03/09/2020	All 'known' Asbestos is checked for condition annually. The known Asbestos at PDK is Room 105 – Toilet Cistern – Amosite Room 001 - Toilet Cistern – Amosite This survey wasn't intrusive however, and an R&D survey would be suggested prior to demolition or renovation works Within CU Tower there is a small amount in the lift braking system and internal lift motor which is identified as a blue risk on the asbestos register.
150	How many ALDIS lamps are at each location	03/09/2020	There is one ALDIS lamp at each location with multiple gels.
151	Is a fully integrated RT recording required	03/09/2020	Yes - as part of Q159
152	Can the archiving requirements be advised	03/09/2020	The legislative requirements for archiving is not currently known but a suggestion of 28 days is made as this ties in with voice recording capability.

<p>153 Please confirm that for Schedule 2 - Schedule of Requirements items 3 to 18 will be changed from Fixed price to Rough Order of Magnitude (ROM)</p>	<p>03/09/2020</p>	<p>On review of the current pricing schedule for this requirement The Authority believes that there is sufficient information available from the clarification responses, site visits and Statement of Requirement (SOR) to allow for the supplier to provide firm prices for the options requested in the tender documentation. The Authority is therefore unable to accept the request for estimated costs to be provided for the costed options. The connectivity and infrastructure between the sites at RNAS Predannack and RNAS Culdrose will be the most substantial challenge in this requirement and this will be greatly reduced at the other optional sites. The Authority believes that if the supplier is able to provide firm prices for the Proof of Concept; this should be achievable for the options.</p>
<p>154 Will the clause at D16 A tender will be considered non-compliant if the total price is greater than the total potential contract value (inclusive of options) of £8,5m be amended to be only the fixed price POC £1.7m price, when the options are revised to ROMs (Disregard – Navy Commercial to answer)</p>	<p>03/09/2020</p>	<p>See question 191 below.</p>
<p>155 Would the Authority be willing to cap the liabilities under the contract which are currently unlimited, to a level more appropriate for this type of project?  1. We would like to include an explicit provision which excludes liabilities for indirect, consequential and special losses for the benefit of both the MOD and the SUPPLIER  2. Aside from matters which cannot be excluded and limited in law, we would like to agree a general cap on liability that references to the price of the Contract. We note that the MoD has capped its liability to a sum equivalent to the total price of the Contract Deliverables payable. We would like to request a mirroring provision for the SUPPLIER.</p>	<p>03/09/2020</p>	<p>1) We have sought advice and The Authority is explicitly unable to limit liabilities in terms of indirect, consequential and special losses. The Authority is are therefore unable to accept this request.  2) The Authority is unable to accept a general cap on liability, so is unfortunately unable to a accept this request.</p>

156	Site visit. As we are working still in slightly unusual times with travel restrictions and that our partner's technical team are all overseas we were unable to get a team together for the published site visit. Would it be possible to conduct an additional site visit in the weeks commencing 7 or 14 September. A completed site visit will be important to be able to provide a response for this opportunity.	03/09/2020	We are unable to accommodate requests for further site visits.
157	Camera Mast. The construction of a camera mast between 30 October and 31 December could be tight depending upon other factors including enabling works, formalities and adherence to national and local regulations. Would the authority be open to an extension of the construction timelines?	03/09/2020	The Authority has taken the decision to extend the estimated delivery date for the Purchase of Remote Tower and Installation for RNAS Predannack and Support to establishing Proof of Concept (items 1 and 2 on "Schedule 2 - Schedule of Requirements" in the ITT) to 01 February 2021.
158	Camera Mast positioning. Who will be responsible for the decision on where the mast will be positioned, the height of the mast, and the approval of the mast construction on the airfield?	03/09/2020	The siting board will be Chaired by OF4 ATM SME.
159	GFX / GFE. Will all radio comms and VCS equipment be provided as GFE / GFX by Programme MARSHALL?	03/09/2020	The bidder is required to provide radio comms and VCCS as part of the PoC.
160	Statement Relating to Good Standing. We kindly ask for an extension of the deadline to return the signed Statement Relating to Good Standing, to 25 September 2020. (Disregard – Navy Commercial to answer)	03/09/2020	Please return the Statement Relating to Good Standing with your tender via the AWARD portal. The Tender Return deadline is 10:00 19th October 2020.
161	Enabling Works. Would any enabling works required for infrastructure installations at RNAS Predannack be carried out by DIO based on a requirement laid out in a response from the successful provider	03/09/2020	DIO will manage the enabling works delivery for the infrastructure installation.

162	Can the Authority provide the Project Marshall Tower Surveys completed by Aquila for all the RNAS sites?	07/09/2020	Please email katie.Goble100@mod.gov.uk or Hannah.streatfield100@mod.gov.uk for access to these documents. The surveys are not to be relied upon and are to be used for information purposes only. The MoD cannot assure the contents of the survey reports and does not accept any responsibility or liability for any inaccuracies or omissions.
163	Am I right in my understanding that we will receive login details for the AWARD portal from you at some point (no later than 5 working days before submission deadline)?	02/09/2020	That is correct. Please forward the name and email address of the person/s you wish to be set up with AWARD access to katie.goble100@mod.gov.uk. The request should be sent through to me no later than 5 working days before the Tender Return Date.
164	Was there a PQQ for this requirement or did you go direct to ITT?	01/09/2020	There was no PQQ for this requirement.
165	The ITT Tender Submission Checklist requires the tenderer to confirm that a Purchase Order has been completed and signed. There does not appear to be a draft Purchase Order included in the ITT documentation. Can the Authority therefore confirm if tenderers should disregard this requirement?	11/09/2020	Apologies – this is an error. Tenderers can disregard this requirement. The Invitation to Tender has been amended.
166	The safety assurance process will require 'MOD Approval' from RN/ATM/MOD Duty Holders with Risk to Life (RtL) responsibilities who interface platforms into the RNAS Culdrose. Can MOD identify the list of Duty Holders and confirm that the route for this task will be undertaken by either CU SATCO or RN/ATM Authority as the Duty Holder 'Facing' organisation?	11/09/2020	Head of Establishment and Aviation Duty Holder for CU and PDK - Captain Finn Royal Navy. RiSP for Remote Tower will be subject to Equipment Acceptance Board led by RTSA RN/RAF to be determined, followed by SSACB - those two Boards together with 1 through 4 Part Safety Case will inform Duty Holders of risk. Parts 1 through 3 are engineering delivery team focused with Part 4 to be completed by the ATM SME. The ATM SME will contribute to Parts 1 through 3, that person/role is yet to be identified.
167	Will the Authority clarify dates (close down or holidays) where access to the Culdrose and Predannack sites is not permitted by the project and its stakeholders?	11/09/2020	Access to the site over Christmas Leave 18th Dec - 5 Jan will be limited.

168	<p>4. SoR-87 - CAP1849 &amp; 1850 – CAA guidance documents</p> <p>a. The SOR states the solution will comply with regulations JSP440 (SoR-89), JSP608 &amp; Leaflet 4800 (SoR-90), CAP18549 &amp; CAP1850 which is part of CAP1753 Cyber Security Oversight Process.</p> <p>CAP1549 &amp; CAP1850 are guidance for completing self-assessment documents, not a framework or process like JSP440 (SoR-89), JSP608 &amp; Leaflet 4800 (SoR-90) and as such it cannot be complied with - please confirm you agree with our understanding of regulations?</p>	11/09/2020	<p>The relevant CAP documents, as described in SoR-87, are CAP 1753 (a process to be followed to assure the system), and the solution should comply with CAP 1753, including/using the guidance provided at CAP1849 and CAP1850.</p>
169	<p>5. SC Clearance / Overseas engineers</p> <p>SoR-86 states ""The Supplier shall provide personnel cleared to handle information classified to Official Sensitive</p> <p>b. In the recent bid for Picasso (Cyber Risk Rating of HIGH), the MOD confirmed that there are no nationality constraints with BPSS cleared (or equivalent) personnel accessing OS.</p> <p>Is the previous MOD statement still applicable?</p> <p>c. In the ITT, point 20 (security considerations), Personnel without SC Clearance will not be given access to MOD Facilities. In the recent bid for Picasso (Cyber Risk Rating of HIGH), the contract stated that sub-contract personal from Australia, Canada, New Zealand or the United States were acceptable.</p> <p>Where the Contractor is partnering with a non-UK organisation and personnel, would those from Australia, Canada, New Zealand or the United States or those with BPSS (or equivalent) be acceptable? Or could additional measures be put in place to permit access?</p>	11/09/2020	<p>SoR – 86 states that "The Supplier shall provide personnel cleared to handle information classified to Official Sensitive ". JSP 440 leaflet 7 – Personnel Security states that a BPSS is an appropriate level to view Official information and in fact personnel with this clearance can have limited, supervised access to SECRET. It is agreed that a BPSS would be an appropriate level of clearance.</p>

170	<p>Please clarify the role of the SAC and their appointment.</p> <p>a. Line SoR-91, please confirm whether the SAC will be appointed by the MOD, will that be an MOD person or consultancy?</p> <p>b. Line SoR-94 states the SAC will create the RMADS. In previous MOD projects the SAC normally reviews the RMADS?</p>	11/09/2020	SAC – The SoR – 91 – states ‘A Security Assurance Coordinator (SAC) is included in the supplier design team’, Navy Digital do have SAC resource which will be used to provide assurance that the supplier SAC outputs conform to the requirements laid out in the SoR/ITT.
171	<p>Would it be possible to deliver hardware to RNAS Culdrose in advance of Contract Award?”</p>	10/09/2020	We will not be able to accommodate the request to store hardware/equipment at RNAS Culdrose.
172	<p>Is the Contracts Finder website the best place to check for updates to the Clarification Questions/Responses and other updates or should we be looking at DCO as well?</p>	16/09/2020	Any updates to the CQ register and ITT in general will be uploaded to Contracts Finder, and DCO updated where required to reflect this.
173	<p>Please provide the height of the Predannack Tower from ground level, can the height be provided to the top of the tower cupola and the top of the concrete structure without the tower cupola</p>	16/09/2020	ATC Tower is 106.42m The ATC level is 88.01m as per the measured height survey
174	<p>Noting the deadline for clarification questions has moved to 21 September and your response to all CQs by 28 September would the authority consider a further extension to the submission deadline to allow more time between getting answers and submitting proposals?</p>	16/09/2020	After internal discussion The Authority has decided to accept the request to extend the tender return date until 19th October 2020. This will ensure that all suppliers have sufficient time to build the clarification responses into their tender responses.. A revised delivery and tender timeline will be included within the revised tender documentation.
175	<p>Please clarify SoR-165 which is referred to in SoR-34. The requirement table only shows requirements up to SoR-122</p>	16/09/2020	The reference to SoR-165 is in error.
176	<p>Please confirm that any VCS system changes required to facilitate remote tower operations are in scope for this tender.</p>	16/09/2020	The bidder is required to provide radio comms and VCCS as part of the PoC.

<p>The SoR identifies the requirement for all Contractor Personnel to have a NATO Security Check (SC) clearance. In relation to this required can you please confirm:</p> <p>i) Are only the staff intended to access the relevant MOD (RNAS) sites is required to have the respective SC clearances or all staff involved in the contract delivery?</p> <p>ii) Due to COVID-19 restrictions, the UKSV is prioritising NATO Security Check (SC) clearance applications. Will the Authority request a high priority for such requests to ensure they are processed by contract start? If not, is the Authority willing to accept a Case ID to demonstrate that a security clearance has been submitted for processing, plus additional security measures (such as escorting by a suitably qualified member of staff) until a NATO SC clearance has been granted?</p> <p>iii) For non-UK Residents, we believe the applicable Security Clearance Process according to MOD Standards to be the International Visits Control Office (IVCO). Can you confirm that the required Security Clearance to be held by all relevant contract staff for non-UK Residents is clearance in accordance with the IVCO procedure?</p>	<p>16/09/2020</p>	<p>SoR – 86 states that "The Supplier shall provide personnel cleared to handle information classified to Official Sensitive ". JSP 440 leaflet 7 – Personnel Security states that a BPSS is an appropriate level to view Official information and in fact personnel with this clearance can have limited, supervised access to SECRET. It is agreed that a BPSS would be an appropriate level of clearance.</p>
<p>178 Within the Tender Submission Checklist document, can you please clarify what is meant by “purchase order completed and signed”? Who is expected to raise a PO at time of tender submission and for what purpose?</p>	<p>16/09/2020</p>	<p>Apologies – this is an error. Tenderers can disregard the requirement for a completed and signed Purchase Order in the Tender Submission Checklist.</p>
<p>179 Would it be possible to have photographs (360 views) and scale plans of:</p> <ul style="list-style-type: none"> <li>o Redannack VCP</li> <li>o Redannack Radio equipment room</li> <li>o Uldrose Radar room</li> <li>o Uldrose VCP</li> <li>o Uldrose Flight Planning office.</li> </ul>	<p>18/09/2020</p>	<p>Scale plans are not available but photographs are available upon request via Commercial</p>

180	Are there any known deficiencies in the VHF/UHF communication between aircraft at Predannack and ATC at Culdrose (and Vice Versa)?	18/09/2020	The existing comms arrangement will be sufficient to support the PoC.
181	What communication methods are established between Predannack ATC and the on-site Fire Service in addition to the crash alarm? eg Telephone, UHF PMR?	18/09/2020	There is a telephone line between the PDK ATCO and the on site Fire Service in addition to the Crash Alarm.
182	What met data is measured at Predannack and what sensors (make and model) are installed?	18/09/2020	PDK has an anemometer, which the PDK ATCO has a read out for to give wind speed and direction. This equipment is maintained by UK Met Office Exeter.
183	Are any remote access controls in use at Predannack (doors fences etc)? description if in use.	18/09/2020	There are none
184	Detailed SoR item SoR-34 refers to requirement SoR-165; however the SoR requirements only go up to SoR-122. Can the Authority please indicate where to find information regarding SoR-165?	18/09/2020	Duplicate question
185	Can the Authority please provide a mapping of the detailed SoR Requirements given in Annex C to the 11 technical scoring criteria given in the ITT document, Table D22?	18/09/2020	We do not intend to provide a mapping of Annex C SoR requirements to the technical scoring criteria in Table D22 of the ITT. The Annex C requirements are grouped under headings to facilitate easier read-across to other elements of the ITT.
186	Can the Authority please the relationship between the requirement for the system to have an update rate great than 1 fps and the statement that regulatory approval has been achieved for systems with 25 and 30 fps?	18/09/2020	The supplier is to provide a system that is compliant with the regulations as stated in the references. The indicative rate of 25 and 30 fps is contained within the references as guidance material and is referred to accordingly.

187	<p>In your response to CQ91, you stated that 'If suppliers think they can achieve AAOS approval in time for PoC and can show evidence then it would be considered.' While a supplier can carry out the requisite actions to achieve AAOS approval, a significant unknown factor is MAA resourcing and priorities; MAA whose Guidance Material states that approval is likely to be in the region of 9 to 12 months. To ensure all suppliers are treated equally, can the Authority advise whether any priority is to be granted to such applications or whether an AAOS application and subsequent ATM Organisation Exposition, together with supporting evidence which identifies the roadmap to MAA approval, would be sufficient at time of contract award.</p>	14/09/2020	<p>The supplier does not have to be AAOS approved at contract award on the provision that they have engaged with the MAA, been briefed on their AAOS responsibilities and can show that they are on a recognized 'Route to Approval'.</p>
190	<p>We are unable determine if the copy of JSP 440 that we hold is current and valid. As this is a protected and controlled document suppliers are unable to access the latest version. Could the authority please supply us with a current version of JSP 440.</p>	21/09/2020	<p>A response has been requested.</p>

<p><b>Pricing and evaluation</b></p> <p>1) For the “Total Price” element of the Financial Evaluation, will the Authority use the “Total Firm Price Excluding Options” (TFPEO) or the “Total Firm Price if Options invoked” (TFPOI)?</p> <p>2) Please acknowledge that the Authority accepts that pricing for options will be subject to caveats.</p> <p>3) How will the Authority will evaluate the TFPOI (if this is the selected method of financial evaluation) to ensure that the tender process is fair.</p> <p>4) Does the Authority intend that the TFPOI cannot exceed £8.5mil</p>	<p>17/09/2020</p>	<p>1) The Authority will use Total Firm Price if Options invoked (TFPOI) to calculate the tenderer Evaluation Score using the stated formula of Total Price/Technical Score in the ITT.</p> <p>2) We would expect tenderers to include details of any assumptions, dependencies and exclusions in their tender. The Authority does require firm pricing for all requirements detailed in Schedule 2 (“Schedule of Requirements”) of the ITT. The Authority believes that there is sufficient information available from the clarification responses, site visits and Statement of Requirement (SOR) to allow for the supplier to provide firm prices for the options requested in the tender documentation. The connectivity and infrastructure between the sites at RNAS Predannack and RNAS Culdrose will be the most substantial challenge in this requirement and this will be greatly reduced at the other optional sites.</p> <p>3) On review of your point in reference to maintenance options The Authority agrees that they would only ever take up 50% of the maintenance options requested. Therefore the Authority has decided to only include the highest level cover (Gold) within the financial evaluation. The Authority will evaluate all Tenders using the evaluation criteria set out in the ITT. The total of the TFPOI excluding the bronze cover will be the value that is evaluated. A detailed example of how the price will be evaluated is provided within the tender documentation. Amended ITT docs will be issued to include this minor change to the evaluation wording.</p> <p>4) The TFPOI (excluding pricing for bronze cover ) cannot exceed £8.5M. We have taken on-board your point regarding the maintenance options and that only 50% of these options will ever be taken up and have made the decision that we will only evaluate on the gold-level of maintenance provision. We will still require the pricing for the bronze level of cover.</p>
<p>192 I am formally requesting an extension to the submission deadline to 19 October 2020.</p>	<p>21/09/2020</p>	<p>After internal discussion The Authority has decided to accept the request to extend the tender return date until 19th October 2020. This will ensure that all suppliers have sufficient time to build the clarification responses into their tender responses.. A revised delivery and tender timeline will be included within the revised tender documentation.</p>