

Clarification Questions Log - Site Wide Environmental Monitoring System Replacement Project

Q. No.	Question	Response
1	Could I please request that a User Requirement Specification (URS), facility plans and or sensor list (If not part of the URS). Normally our proposal directly responds to the technical content that is contained within the URS and we would provide a compliance statement as part of our proposal.	Appendix E of the tender is the URS we are working to. While Appendix E2 - Site Plan pdf doc should give an idea of which buildings are which. We can go into more detail during site visits. For the sensor list, please see Appendix E3- Existing Comark Units pdf doc which gives the quantity and type of Comark Sensor which is in place at the moment.
2	1. We appreciate you are looking for two tenders. One to replace the hardware and a second to provide ongoing calibration, services and maintenance. Would you consider a single tender, where all costs are rolled into a single subscription. Effectively this would mean 0 upfront costs as the hardware costs would be split over the entire contract term.	No, we cannot consider a single tender on the basis of a single subscription. The tender should show the cost of the supply and installation of the new system and the maintenance as separate items. Please use Payment schedule in Appendix C. However, an extended warranty cost on the supply and installation can be considered.
3	2. Please can you confirm if the £305,000 budget is for the entire 5 year procurement lifecycle, or just the initial hardware install. If the later, what is your anticipated ongoing budget?	The budget stated is for capital costs.
4	3. Please can you confirm the discrepancy in contract durations as stated on page 6 (01/05/2024 – 31/03/2025 = 11 months) and page 7 (3 + 1 + 1). Our understanding is you are expecting the install to be complete by 31/03/2025, at which point the 3+1+1 duration becomes effective for maintenance and services.	Design and installation contract will 01/05/2024 - 31/05/2025. With the proposed contract length for the all-inclusive long-term Maintenance Contract will be 3 years with the options of 2no x 1 year extensions. i.e. 3+1+1 commencing once the Warranty has lapsed. So please provide details of the standard Warranty i.e. duration and what it covers and doesn't cover.
5	4. Please can you provide a breakdown of requirements (i.e. total number of fridges, freezers, cold rooms, ambient etc.).	This is covered by the additional information/drawings which can be sent out once the NDA has been signed.
6	5. Please can you confirm whether you require site-wide humidity monitoring, or if just in certain units, please can you confirm the number.	This is covered by the additional information/drawings which can be sent out once the NDA has been signed.
7	6. Please can you confirm if all buildings are in the same geographical location, or are there multiple sites across the UK.	This is covered by the additional information/drawings which can be sent out once the NDA has been signed.
8	7. Please can you confirm if our price for evaluation is to cover the current 364 units, or the anticipated 450 units.	The price is to cover the current environmental monitoring system. Whilst 364 devices has been identified, the devices have multiple sensors which is detailed in the sensor list and drawings. The new system should cover the existing sensors as per the sensor list / drawings and allow for a future expansion of 25% as per the tender scope.
9	8. Please can you confirm how you would like us to quote for any additional expansions throughout the contract lifecycle.	The price is to cover the current environmental monitoring system. Whilst 364 devices has been identified, the devices have multiple sensors which is detailed in the sensor list and drawings. The new system should cover the existing sensors as per the sensor list / drawings and allow for a future expansion of 25% as per the tender scope.

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10	Subcontracting: Can subcontracting be utilized for specific components of the project? If so, are there any restrictions or guidelines we should be aware of?	We are seeking a supplier who has expertise in the field of Environmental Monitoring Systems and would be looking for the supplier to have the technical knowledge and experience for the design and delivery of the project. The use of sub-contractors for the works is acceptable and there are no restriction and guidelines above and beyond typical contracts, however this resource should be used to aid with the implementation stage of the project as opposed to the sub-contractor taking on the design and delivery of the project.
11	1. The scope states the project is to replace Pirbright's environmental monitoring system and details 'Implementation of new hardware in situ with corresponding materials, infrastructure required for system' To be clear do you require supply and full hard installation of the new units? Will the old units need to be removed and disposed of in accordance with IEEE? Are there any restrictions for locating (access and fixings) or new units? Will there be any installation works completed by onsite staff?	We are looking for the supplier to supply and install the new system. We would then expect the new system to operate alongside the existing system for a period of time before removing the old units. The old units will need to be disposed of in accordance with industrial waste regulations. In regards with installation of sensor inside freezers, ideally we would like the supplier to complete this installation, so we would be looking for details on how this would be carried out.
12	2. Following installation will you require a UKAS accredited thermal survey to accredited the installed system? The usual practice is to undertake a comparison survey with an independence system and to compare the uncertainties identified.	Please see document named "Clarification_Question_Log_Annex_1" in response to this query.
13	3. Will the ongoing maintenance/calibration be required by an UKAS ISO 170125 accredited provider?	Please see document named "Clarification_Question_Log_Annex_1" in response to this query.
14	4.The sensor ranges quoted in the User Requirements document (Temperature range from - 150C to +100C Humidity from 0-100) don't align with the values provided by the existing Comark devices. Would it be possible to provide a breakdown of the ranges required in future for each device type. Additional device sensors make a significant difference to scope requirements.	This is covered by the additional information/drawings which can be sent out once the NDA has been signed.
15	5. Can you advise if we are tendering against the manufacturer, the reason for asking is that there is little chance of us procuring the hardware at a competitive price and hence have little commercial opportunity for winning the work.	At this stage we do not know who will be tendering.
16	6. Will there be a period available to test new equipment and proof of concept stage to ensure all communications and IT systems are compatible?	Once a contract has been agreed, we have allocated a 2 month period for Technical Design Review. This may be an opportunity to carry out a proof of concept.
17	However there is also mention of the below, is there another tender for the long-term maintenance? If not, then what format should the maintenance tender be in and how should we return it? The tenderer should also submit a separate tender to enter into an all-inclusive long-term Maintenance Contract with Pirbright, covering all parts, consumables and labour required for scheduled maintenance including repairs and emergency callout provisions. The supplier's attention is drawn to the following general requirements: •The Maintenance Tender is to include all consumables and labour. •The Maintenance Tender is to cover all scheduled and unscheduled maintenance activities and repair cover, and define the estimated timescales to attend repairs.	Please see document named "Clarification_Question_Log_Annex_1" in response to this query.
18	Please can you provide a full copy of the terms and conditions related to this bid.	The contract will be changed to NEC 4 Engineering and Construction Contract Option A and will be negotiated on award of tender.

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19	Are you willing to negotiate on terms and conditions?	The contract will be changed to NEC 4 Engineering and Construction Contract Option A and will be negotiated on award of tender.
20	In X7 there is a daily delay fine of £250, would you consider removing this penalty?	The contract will be changed to NEC 4 Engineering and Construction Contract Option A and will be negotiated on award of tender.
21	The tender states all engineers to be directly employed, but then asks for details of subcontractors. Does this mean that it is acceptable for engineers to be directly employed by subcontractors rather than ourselves?	We are seeking a supplier who has expertise in the field of Environmental Monitoring Systems and would be looking for the supplier to have the technical knowledge and experience for the design and delivery of the project. The use of sub-contractors for the works is acceptable and there are no restriction and guidelines above and beyond typical contracts, however this resource should be used to aid with the implementation stage of the project as opposed to the sub-contractor taking on the design and delivery of the project. Details of all proposed sub-contractors must be provided including the information requested in the Standard Selection Questionnaire and agreed before commencing. We withhold the right to request details including employment status of any sub-contractors along the supply chain including their sub-contractors etc.
22	Can we have a list of the specific equipment you are wanting to remotely monitor?	This is covered by the additional information/drawings which can be sent out once the NDA has been signed.
23	How many floors are in each building where the equipment is located?	This is covered by the additional information/drawings which can be sent out once the NDA has been signed.
24	What are the locations of your current CoMart Gateways?	<p>The gateways have not been specified on the floor plan as this is specific to the Comark system and it has been omitted to avoid confusion when specifying the new system.</p> <p>To answer the question, 'Appendix E3 - Existing Comark Units' gives a list of each gateway (14 in total excluding Brooksby) and the following abbreviations are define GF = Ground Floor, FF = First Floor, EW = East Wing, WW = West Wing, NW = North Wing.</p> <p>All gateways have a socket outlet and ethernet connection.</p>
25	How many of these Gateways are in each building & over how many floors?	<p>The gateways have not been specified on the floor plan as this is specific to the Comark system and it has been omitted to avoid confusion when specifying the new system.</p> <p>To answer the question, 'Appendix E3 - Existing Comark Units' gives a list of each gateway (14 in total excluding Brooksby) and the following abbreviations are define GF = Ground Floor, FF = First Floor, EW = East Wing, WW = West Wing, NW = North Wing.</p> <p>All gateways have a socket outlet and ethernet connection.</p>

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26	1. Please can you confirm what BACS is in reference to please for the following requirement? 'The system should default to BACS when out of hours'	BACS - Buildings Automation and Control System. The system does not need to default to BACS.
27	1. Please provide a copy of your terms & conditions.	The contract will be changed to NEC 4 Engineering and Construction Contract Option A and will be negotiated on award of tender.
28	2. Please confirm the format for the separate bid for the long term maintenance contract and if this has a separate reference/project number.	On going maintenance should be provided as a separate section and not as a separate tender.
29	3. Please can you explain further the requirement for temperature alarm thresholds to be automatically increased/decreased by one degree at a time. Is this required if users with associated permissions are able to change alarm thresholds on a device by device basis at their discretion to a 1°C or greater resolution?	Increments of +/-1°C are acceptable
30	4. Please can you define an ideal format for data presentation when reported by temperature range. What parameters should be user adjustable?	Adjustable time range (hours, day, weeks, month) vs temp and/or humidity
31	5. What does it mean for the system to default to BACS when out of hours? Is it acceptable to provide full control of notifications 24/7 by user by device?	BACS - Buildings Automation and Control System. The system does not need to default to BACS.
32	6. Please can you provide the parameters / protocol for sending alarm data to the Thing Worx IIoT system.	Not required as part of this tender.
33	7. Please can you confirm the compliance requirements for NaCTSO, Home Office and GLP/GMP.	All to ISO/IEC 17025 please
34	8. Please can you confirm the number of devices requiring calibration, as well as which temperature and humidity points are to be tested.	Please see document named "Clarification_Question_Log_Annex_1" in response to this query.
35	9. Please can you confirm whether the supplier is to undertake validation of all other devices using these calibrated sensors as a reference, or whether this will be undertaken by Pirbright internally?	Please see document named "Clarification_Question_Log_Annex_1" in response to this query.
36	1. Please provide the NEC4 'Schedule 1 – z clauses'	The contract will be changed to NEC 4 Engineering and Construction Contract Option A and will be negotiated on award of tender.
37	2) We are familiar with GMP, are you able to provide further details about the level of Home Office and NaCTSO accreditation required?	All to ISO/IEC 17025 please
38	3) Please provide details for the number of gateways required and their locations complete with any extenders / boosters. Can we assume an ethernet connection and 13A socket outlet exists at each gateway location already? During the site visit it was discussed about providing us a list of all the sensors and their spec's located at the various points with a site layout and identifying any poor reception area's.	This is covered by the additional information/drawings which can be sent out once the NDA has been signed. The gateways have not been specified on the floor plan as this is specific to the Comark system and it has been omitted to avoid confusion when specifying the new system. To answer the question, 'Appendix E3 - Existing Comark Units' gives a list of each gateway (14 in total excluding Brooksby) and the following abbreviations are defined: GF = Ground Floor, FF = First Floor, EW = East Wing, WW = West Wing, NW = North Wing. All gateways have a socket outlet and ethernet connection.

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39	4)Will we be able to take tools i.e. drills etc. into all the area's / locations to mount the Gateways and other units if required.	It is possible to take tools into containment areas but they will need to be fumigated out. Due to the nature of the wall coverings, it would not be recommended to make any wall penetrations as this may not be possible. However, it may be acceptable to attach the devices to a Trespa backing which can then be glued to the wall. This way the devices are mounted on the trespa backing so they could be removed in the future if needed and also there is no need for any wall penetrations.
40	5)Please can you provide environment details, for each location and sensor information (Specification) for all sensors required etc. i.e. •How many freezer units •How many room temperature sensors •How many room humidity sensors •How many room temperature & humidity (combo) sensors You state resistant to dust and splashes, but this will need to be more specific in terms of IP ratings in specific areas – or we can be specific when we quote.	This is covered by the additional information/drawings which can be sent out once the NDA has been signed. IP65 minimum will be suitable for the environments where the sensor are used but the supplier needs to be aware that the sensors will be subjected to liquid disinfection (wipe down only) and fumigation.
41	6)Will the sensor's need to be calibrated and certified, and to what standards.	All to ISO/IEC 17025 please
42	7)Database requirement (MS-SQL, oracle)	SQL
43	8)Can you define 'high availability' that you require?	High Availability - Fully redundant service that will provide 5x9s availability to the system. Standard IT practice.
44	9)Do you have a specific server requirements, standards or specifications? Should we include for a redundant server, Dell server slices or simply pass the data to you for storage etc.	All our systems are based on DELL servers. Server should be redundant as possible, dual power, dual nic's.
45	10)For user licensing purposes, is there a client limit	This depends on the solution/ licencing requirement?
46	11)What type of client's are to be used (desktop, mobile (Android/IOS))	All if possible
47	12)What is the reporting requirement?	Adjustable time range (hours, day, weeks, month) vs temp and/or humidity
48	13)Can you confirm the sampling rate for each sensor is every 15minutes, with alarms flagged immediately and historical data being stored for 5 years.	The current sampling rate is 15 mins, with alarms flagged immediately. Historical data is to be stored for a minimum of 2 years.
49	14)Will a secure internet connection with remote access for support be permitted?	To be discussed based on your design.
50	15)Is there an induction process and any security clearances required for site working etc.,	Yes, security clearance is required for contractors who need to be approved (working without the need for a security cleared escort). Non-approved contractors will need a security cleared escort.
51	16)Will all the sensors require an LCD display, can you list those that do / don't?	It is possible to access a desktop PC from labs and contained areas and therefore if the dashboard for the new monitoring system can be accessed from the Desktop PC, then it is not necessary for the sensors to have displays. However in the Freezer parks, there is no access to a Desktop PC, so therefore these devices would require a display. It may be acceptable that the freezer parks could have display screens that would cover the devices in that area. Based on the sensor layout drawings, there are 6 freezer parks.

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52	17) Are we able to move to a WiFi based solution, do you have WiFi in house that we can utilise (albeit with more WiFi gateways) or do you still require a separate gateway / mesh network? Your thoughts and clarification on this would be very helpful.	WiFi is available but is limited in containment areas and therefore this should be considered in the tender cost.
53	18) Would you be happy to use Comark equipment in part or as a complete solution? (Their Diligence 600 system comprising sensors with or without their Web based monitoring package?)	So long as the new system is compatible to work within all areas where monitoring is needed, there are no restrictions to put forward any manufacturer's system.
54	Please can you provide a definition of what you consider to be a subcontractor?	We are seeking a supplier who has expertise in the field of Environmental Monitoring Systems and would be looking for the supplier to have the technical knowledge and experience for the design and delivery of the project. The use of sub-contractors for the works is acceptable and there are no restriction and guidelines above and beyond typical contracts, however this resource should be used to aid with the implementation stage of the project as opposed to the sub-contractor taking on the design and delivery of the project. Details of all proposed sub-contractors must be provided including the information requested in the Standard Selection Questionnaire and agreed before commencing. We withhold the right to request details including employment status of any sub-contractors along the supply chain including their sub-contractors etc.
55	Please could you confirm which sections of Appendix D PSC4 Contract Data you require us to complete.	The contract will be changed to NEC 4 Engineering and Construction Contract Option A and will be negotiated on award of tender.
56	With regards to limit to liability, please could you provide clarification on the limit to liability for ourselves? I cannot see that there is a limit to our liability, we are unable to proceed with contracts which do not provide a cap on our liability, so would need reassurance that this could be negotiated.	The supplier should propose any contract amendments together with the submitted tender. Any amendments that the successful tenderer proposes will need to be reviewed. These may be agreed, amended or declined.
57	Where you ask for 'Details of any proposed Sub-Contractors if applicable' please firstly define what you consider to be a subcontractor (I believe we may have already asked this) and secondly advise what information is required regarding the sub contractor	We are seeking a supplier who has expertise in the field of Environmental Monitoring Systems and would be looking for the supplier to have the technical knowledge and experience for the design and delivery of the project. The use of sub-contractors for the works is acceptable and there are no restriction and guidelines above and beyond typical contracts, however this resource should be used to aid with the implementation stage of the project as opposed to the sub-contractor taking on the design and delivery of the project. Details of all proposed sub-contractors must be provided including the information requested in the Standard Selection Questionnaire and agreed before commencing. We withhold the right to request details including employment status of any sub-contractors along the supply chain including their sub-contractors etc.
58	With regards to questions 7.5 and 7.6 in the SQ (shown below) can you clarify whether it relates to this contract only or to our whole supply chain? If the latter it would be difficult to guarantee payment in 30 days for all suppliers as we have existing contractual agreements in place which cannot be amended, therefore we would not be comfortable answering yes to this question. Would this exclude us from the bid? We need a definite answer on this point as we will need to withdraw from the process if it is vital.	Questions 7.5 & 7.6 can be ignored.
59	1)Please can you confirm the acronym BACS in the context of Appendix E, line 6 "The system should default to BACS when out of hours."	BACS - Buildings Automation and Control System. The system does not need to default to BACS.

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60	2) Please can you confirm your expectations of mapping. Is it to be read synonymous with "monitoring" or do you require a visual heat map of the monitored area. If you do require a visual heat map of the unit, is your expectation that this would be live, or completed ad-hoc/annually?	Ad-hoc annually. Mapping of temp dependent facilities is only undertaken annually. The supplier does not need to provide a cost for this on this tender.
61	1. Integration with ThingWorx a) This is no longer part of the scope, please confirm. b) If this is part of the scope, please provide details regarding integration and communication protocols.	Not required as part of this tender.
62	2. BACS connection is not needed as part of this project a) This is no longer part of the scope, please confirm. b) If this is part of the scope, please provide details regarding integration and communication protocols.	BACS need to be able to see the system as a dashboard in the same way as administrators and super users.
63	3. We were told that the budgetary price stated does not include the budget for the Service/Support contract a) Does the institute require us to re-calibrate the system every year?	Please see document named "Clarification_Question_Log_Annex_1" in response to this query.
64	4. Is an IQ/OQ/PQ required for system installation?	Yes, please include this in the tender.
65	5. Can you provide an equipment list encompassing all devices and parameters to be monitored? (including set points and anticipated alarm limits)	This is covered by the additional information/drawings which can be sent out once the NDA has been signed.
66	6. Is chamber mapping part of this scope? If so, please provide a quantity b) Is this required prior to probe installation?	No, Mapping of temp dependent facilities is only undertaken annually. The supplier does not need to provide a cost for this on this tender.
67	7. What type of Calibration do you require? Single Point, 3 Point, ISO:17025 traceable?	ISO/IEC 17025
68	8. Do you require data buffering of the inputs for up to 7 days?	Please confirm the capability of the system when submitting the tender.
69	9. Do you require the Network Receivers to be POE?	Needs to be POE.
70	10. Please describe the UKAS Inputs Temperature Profiling process.	Temperature/ humidity calibration against a reference which is traceable to IS units.
71	11. Please confirm that CVIM and Brooksbury are not part of this project.	Not part of this this tender.
72	12. Do we have to use Appendix C to provide our pricing or can we provide a separate quotation with our price breakdown?	Please use Appendix C.
73	13. Please define "Schedule of Planned Service and Calibration Appendix C. Is this at the time of the initial installation?	Please see document named "Clarification_Question_Log_Annex_1" in response to this query.
74	14. Please define Reactive Maintenance Charges in Appendix C.	Please see document named "Clarification_Question_Log_Annex_1" in response to this query.
75	15. Where should charges be listed for future years of maintenance? In the cover letter or Appendix C? If so where?	Please put in Appendix C.

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76	16. Are the insurance amounts listed mandatory or can we provide our standard coverages?	Please provide your standard coverage. As any changes from the insurance amounts listed mandatory will be reviewed. Please note that it maybe a condition of contract award that the successful tender has to amend/increase their cover.
77	17. Does Appendix D need to be completed in full now or after the award?	The contract will be changed to NEC 4 Engineering and Construction Contract Option A and will be negotiated on award of tender.
78	18. What is your after-hours alarm response protocol currently?	N/A as we are not intending to handle alarms as we do currently.
79	Are there existing conduits / trunking that could be utilised for the purpose (of running cables), and if so, what are the safety protocols in getting access to them? If we cannot use the existing conduits and trunking, is running a new conduit / trunking even a possibility? What certification is required, if any, for both 1 and 2?	<p>The contained areas are all sealed and any cables coming into the rooms from the 'outside' transit through gland plates (such as Roxtec). These gland plates seal individual cables which come through into contained areas. There is no existing conduit / trunking which can be used, so any cables into contained areas will need to be new and run through the gland plates which will require a specialist tooling kit to break apart.</p> <p>The process to break the seal of contained areas would require a shutdown and fumigation of the lab / area. This is an involved process and is coordinated with Science programmes (where science takes precedence) and this will require planning (normal with at least 6 months notice). A permission to work on the lab will also be required which is method statement & risk assessment which takes approximately 3 weeks to review.</p> <p>Following the works, full sealability testing will be required before the lab reopens which would need to be carried out by specialist contractors.</p>
80	1.Do you require UKAS calibration of the sensors? If so: a.How many sensors require UKAS calibration? b.How many temperature points do you require? c.How many and which items of equipment require this? E.g. 10 x -80C freezers, 5 x -20C freezers etc.	Please see document named "Clarification_Question_Log_Annex_1" in response to this query.
81	2.Do you require IQ/OQ?	Yes, please include this in the tender.