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1. Glossary

TERM	MEANING
"Air Quality Standards Regulations"	means the Air Quality Standards Regulations 2010, and amendments (separated for England, Wales, Scotland and Northern Ireland, in legislation), where the AQD 2008 is transposed into UK legislation.
"Affiliated sites"	means affiliated sites are owned and partly or wholly run by the Local Authorities (and by occasion by other public or private bodies) who also measure air pollution for their Air Quality Management Purposes.
"ALN"	means the Automatic London Network
"AMCT"	Means the Annual Mean Concentration Target
"AQD2008"	means the Directive 2008/50/EC of the European Parliament and of the Council of 21st May 2008, on Ambient Air Quality and Cleaner Air for Europe, was adopted in June 2008 and was amended in in 2015. This will also refer to any equivalent UK Regulation post EU exit.
	In the context of this Contract the Legislative background may change following European Union Exit – but the Contractor will continue to align to these EU legislative requirements, as much as feasibly possible until replacement legislation is in place, and if required (if the scope of works changes) a Contract Change Note is issued.
"AQEG"	means the Air Quality Expert Group.
"Asset Register"	means a list of the fixed assets owned by an organisation containing pertinent details about each fixed asset to track their value and physical location.
"AURN"	means Automatic Urban and Rural Air Quality Monitoring Network
"BSI"	means British Standards Institute
"Cabin"	Means a larger, walk in housing
"CDM Regulations"	means the The Construction (Design and Management) Regulations 2015
"CDM Designer"	Means those who (within CDM regulations) as part of a business, prepare or modify designs for a building, product or system relating to construction work.
"CDM Contractor"	Those who do the actual construction work under the CDM umbrella
"CEN"	means the European Committee for Standardisation
"Client"	Means the EA
"CMCU"	means the Central Management and Co-Ordination Unit for the networks in question
"Contract"	means the contract to be entered into by the Environment Agency (the Authority) and the successful Tenderer.
"Contractor"	means the organisation that has been awarded the Contract
"COSHH"	means the Control of Substances Hazardous to Health
"DAQI"	means the Daily Air Quality Index - https://uk-air.defra.gov.uk/air-pollution/daqi

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"DA"	means the Devolved Administrations (DAERA, SG, WG)
"Days"	means "working days" unless otherwise specified
"DDU"	means the Data Dissemination Unit
"DEFRA"	means the Department for Environment, Food and Rural Affairs in England.
"DAERA"	means the Department of Agriculture Environment and Rural Affairs in Northern Ireland.
"EMEP"	means the European Measurement and Evaluation Programme
"Enclosure"	Means a small enclosure not designed for human entry
"Equipment"	means for the purposes of this Specification of Requirements 'equipment ' refers to monitoring instruments, air conditioning units, housing or other associated equipment required for monitoring purposes.
"ESU"	means Equipment Support Units.
"GANTT"	means a bar chart that illustrates the schedule of works and dependency relationships between activities and current schedule status.
"GDPR"	means the Regulation (EU) 2016/679 (General Data Protection Regulation)
"Housing"	Means an overarching term for cabins or enclosures (synonymous with Kiosk in this specification)
"ISO"	means International Organization for Standardization
"Kiosk"	Used in MEICA documents to refer to housings and other removable structures.
"KPI's"	means Key Performance Indicators
"LA"	means the Local Authority
"MEICA"	Means the Mechanical Electrical Instrumentation Control and Automation team in the Environment Agency who provide provide specialist technical advice, technical support and guidance to asset managers
"Open Book"	means an agreement to view data and financial information relating to costs incurred in any one part of the supply chain. So the supplier and customer can work together to ensure that costs are minimised where possible.
"PAT"	means Portable Appliance Testing
"PERT"	Means the Population Exposure Reduction Target
"PM"	means Particulate Matter
"PM _{2.5} "	means particulate matter that passes through a size- selective inlet with 50 % efficiency at cut-off size of 2.5µm.
"PM ₁₀ "	means particulate matter that passes through a size- selective inlet with 50 % efficiency at cut-off size of 10µm.
"Project"	means the work encompassing the supply and installation of a product or series of products from this contract
"QAQC"	means the Quality Assurance Quality Control Services
"SI"	Means the Statutory Instrument for measuring PM _{2.5} targets, legislation that is now in place as part of the PM _{2.5} target setting process. The Environmental

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	Targets (Fine Particulate Matter) (England)
	Regulations 2023 (legislation.gov.uk)
"SG"	means the Scottish Government
	means this invitation to tender and all related
"the ITT"	documents published by the Environment Agency and
	made available to Tenderers.
"Regulations"	means the Public Contracts Regulations 2015 (unless
_	otherwise stated)
"Tender"	means a formal tender in response to this ITT.
"Tenderer"	means anyone responding to this ITT and, where the
renderer	context requires, includes a potential tenderer.
"UK"	means the United Kingdom
	means the website where government based UK air
"UK AIR"	measurements, modelling and reporting data can be
	accessed - https://uk-air.defra.gov.uk
"WG"	means the Welsh Government

2. Background

The Authority manages and maintains national air quality monitoring networks to meet the requirements of EU and UK legislation. The air quality monitors are located around the UK within the Zones and Agglomerations and are housed in standalone enclosures of varying sizes¹. The Contract will meet the need of new Extra Large housings needed for the ACMT and PERT England target setting, which may lead to approximately 10 additional Extra Large housings being needed and installed between 2023 and 2025. Additionally existing stations may need housings replaced as they reach life expired status, as a rate of approximately 1-2 housings per year.

The nature of the monitoring networks is that housings are periodically replaced, and therefore the contract will allow the Authority to purchase further housings from the contract as required. Furthermore, the major expansion of the monitoring networks as part of the $PM_{2.5}$ expansion project will require a number of new housings in new sites – again, purchased from the contract as required. Flexibility in ordering is required – while we envisage 5 extra-large cabins installed over the next 2 years, this not confirmed. It is also known that evolving $PM_{2.5}$ equivalence analysers are being designed to operate outside of traditional air-conditioned housings. However to minimise risk and future proof the network for potential other future monitoring requirements, it is currently expected housings from this contract will be deployed for all expansion sites. This position may be subject to future review as a new $PM_{2.5}$ Analyser tender for roadside monitoring purposes is projected to be released by the Authority, as shown in Figure 1.

In addition, the Contractor shall have the capability to produce bespoke housings within defined size ranges and with different architectural qualities from those set out below. The Contractor shall provide storage of all goods delivered prior to final assembly and installation.

The Contractor will be considered a 'CDM Designer' under CDM for the purposes of designing the necessary construction and layout details of the housing, and for the manufacturing and installation of the Housing will act as a 'CDM Contractor' under the Construction (Design and Management) Regulations 2015 (CDM 2015). The authority acts as Client although we have a significant input from the Principal CDM Contractor (the relevant CMCU) in the creation of necessary documents to demonstrate we have undertaken our client role. As a CDM Designer for the housing, the successful

¹ For completeness, some monitoring sites are housed within third party structures (e.g. a school outbuilding), however this is not relevant to this requirement.

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Contractor will need to work on the operational layout of the housing to meet any site-specific needs and gain approvals from CMCU prior to installation at the specified site. Following installation, final 'as built' drawings such as cabin layout and electrical single line diagrams are required to be shared so that in case of any cabin re-configurations the site layout can be amended, and in case at the final install stage, site layout alterations were required.

The delivery of the housings relies on cohesive interactions between the Authorities CDM Contractors who deliver the management of the contracts and deliver the CDM work. Figure 1 details these current interactions and the expectations of how the Contractor will help deliver the 'New' $PM_{2.5}$ sites.

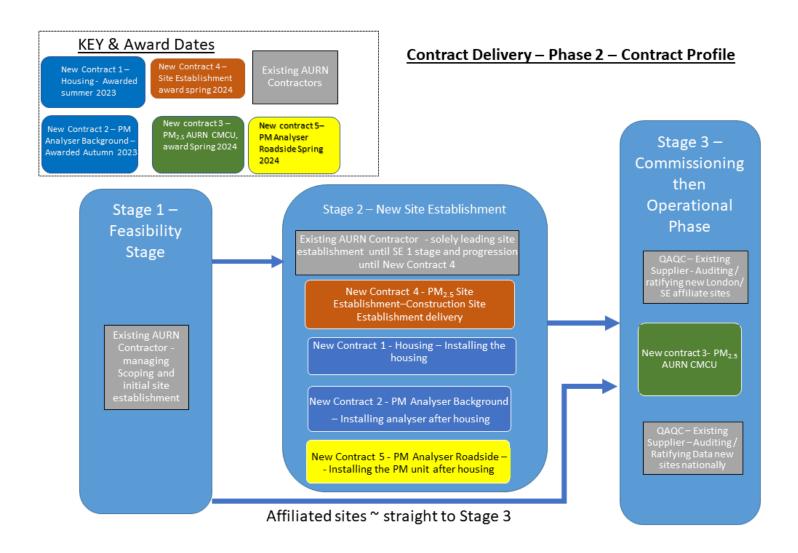


Figure 1 - Schematic of the process relationship between contractors and the EA for delivering new AQ monitoring sites

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3. Contract Objectives

- 3.1 Deliver a standard design of housing to the requirements of the Environment Agency and the Principal CDM Contractor. Provide flexibility for bespoke housings as needed.
 - Demonstrate capability of meeting EA minimum standards design, fabricate, Factory acceptance testing, transportation, offloading, installation and testing (where required), site acceptance testing (where required), decommissioning and disposal requirements, drawings, documents and Operation and Maintenance manuals and schedules.
- 3.2 Demonstrate capacity and resource to manage an internal design layout and agreement with our management CDM Contractor
- 3.3 Demonstrate capacity to provide CAD drawings, visualisations and housing details to support any planning application process for sites where a full planning application process is being delivered by CMCU, and for site-by-site amendments.
- 3.4 Demonstrate safe working practices for manufacturing, delivery and install
- 3.5 Provide flexible capacity and good value to the Authority
- 3.6 Produce high quality, energy efficient housings to help us meet our net zero objectives
- 3.7 Demonstrate supplier can produce a timely product and service delivery for installation
- 3.8 Deliver and provide programme management of the build and installation work so that the programme of cabin design and install will mean the PM_{2.5} monitoring expansion is delivered in a timely and cost-effective manner

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4. Contract Structure, Contract Lifespan and Deliverables

4.1 Contract Structure

The contract will be awarded as 1 lot based on the supply of a standardised design detailed in 6.2

As per the discussion in section 6.2.2 custom housings are to be designed and built on a case-by-case basis, pricing agreed on a similar basis.

4.2 Contract Lifespan

The contractor awarded will supply housings to the EA and other stakeholders for the period of 3 years from commencement with an option to extend the contract for a further three 12-month periods.

As discussed in section 2 exact numbers of housings required cannot yet be confirmed, the following are likely requirements over the contract lifetime. They exclude any potential use of this call off contract by DEFRA or other partners in a call.

Table 1 - Projected housing requirements (Environment Agency only)

Project Name	Number of housings	Timescale
		(financial year April to March)
PM _{2.5} expansion Year 1	~ 4	f/y 23/24
PM _{2.5} expansion Year 2	2	f/y 24/25
Business as usual replacement	0-1	Per contract year for the life of the contract (fy 23/24, 24/25,25/26). 3 extension
		years possible

Minimum Capacity of 2/year

4.3 Contract deliverables

The Key Contract Deliverables the contractor will be expected to provide are outlined below.

Table 2 Key Deliverables

No	Contract Deliverable			
1	Ordered housings that are of a standard design are to be delivered with components ready			
	for install (pre fit out) within a minimum 4-month window or less than this as per contracted			
	offer.			
2	Bespoke design ordered housings are to be delivered as per agreed cost, specification and			
	timescale at point of order			
3	Liaise with Principal CDM Contractor and other contractors to:			

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required. Complete design risk assessment for cabin design, and to liaise with CMCU regardin any remediation required Utilise the Red/Amber/Green list when designing, to align with EA best practice techniques to minimise risk Supply buildability statements for pre-construction information Allow necessary preparatory work/groundworks to be carried out Fitting out of housings to the requirements of the specific site within 1 month of request Store produced goods until installation or for a maximum of 2 years. Storage capacity must be sufficient to hold 2/3 of the proposed cabins in Table 1 - Projected housing requirements (Environment Agency only) based on a worst case scenario of being unable to install any housings. To carry out delivery and installation in liaison with CMCU when site arrangements are confirmed as being ready for install To have the technical competence and capability to install air quality instrumentation such a gas analysers and particulate analysers as part of initial housing installation on site Compliance with all relevant CDM and building regulations – respond to any issues raised by commissioning or Principal CDM Contractor / Client Audit Ensuring compliance of subcontractors of supply chain to agreed standards. Compliance with all relevant health and safety standards, and ensure subcontractors do the same Safe removal and legal disposal of old or damaged housings under WEEE regulations, and a conditioning systems via F-gas regulations. Provision of and live update of a database/tracker of orders (to the level of the individual housing) received from the Authority, their expected time of arrival (ETA) status and any issues encountered. Attendance of regular planning/oversight meetings with the Authority/CMCU as required Complete delivery within the 2-month window and provide completed installation/commissioning sign off forms at the time of delivery (to storage/or installation) or installation/commissioning sign off forms at the time of delivery (to storage/or installation		
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Provision of and live update of a database/tracker of orders (to the level of the individual housing) received from the Authority, their expected time of arrival (ETA) status and any issues encountered. Attendance of regular planning/oversight meetings with the Authority/CMCU as required Complete delivery within the 2-month window and provide completed installation/commissioning sign off forms at the time of delivery (to storage/or installation) or installation/commissioning and report to the Authority Dead test certificate supplied alongside the delivery form. Final design drawings to be provided to the authority for reference purposes An issues/obligations risk log / KPI tracker in an agreed format will be maintained by the Contractor as required and at least quarterly. Provision of cabin alteration services - significant cabin alterations and design changes to existing Authority or partner owned cabins, for example a change to the design of an inlet cage Declaration of Conformity (DoC) for the Kiosk as an integrated system, and a UKHCA (or CE		Safe removal and legal disposal of old or damaged housings under WEEE regulations, and air conditioning systems via F-gas regulations.
Attendance of regular planning/oversight meetings with the Authority/CMCU as required Complete delivery within the 2-month window and provide completed installation/commissioning sign off forms at the time of delivery (to storage/or installation) or installation/commissioning and report to the Authority Dead test certificate supplied alongside the delivery form. Final design drawings to be provided to the authority for reference purposes An issues/obligations risk log / KPI tracker in an agreed format will be maintained by the Contractor as required and at least quarterly. Provision of cabin alteration services - significant cabin alterations and design changes to existing Authority or partner owned cabins, for example a change to the design of an inlet cage Declaration of Conformity (DoC) for the Kiosk as an integrated system, and a UKHCA (or CE	12	housing) received from the Authority, their expected time of arrival (ETA) status and any
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Dead test certificate supplied alongside the delivery form. Final design drawings to be provided to the authority for reference purposes An issues/obligations risk log / KPI tracker in an agreed format will be maintained by the Contractor as required and at least quarterly. Provision of cabin alteration services - significant cabin alterations and design changes to existing Authority or partner owned cabins, for example a change to the design of an inlet cage Declaration of Conformity (DoC) for the Kiosk as an integrated system, and a UKHCA (or CE	14	installation/commissioning sign off forms at the time of delivery (to storage/or installation)
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An issues/obligations risk log / KPI tracker in an agreed format will be maintained by the Contractor as required and at least quarterly. 18 Provision of cabin alteration services - significant cabin alterations and design changes to existing Authority or partner owned cabins, for example a change to the design of an inlet cage 19 Declaration of Conformity (DoC) for the Kiosk as an integrated system, and a UKHCA (or CE		Final design drawings to be provided to the authority for reference purposes
Provision of cabin alteration services - significant cabin alterations and design changes to existing Authority or partner owned cabins, for example a change to the design of an inlet cage 19 Declaration of Conformity (DoC) for the Kiosk as an integrated system, and a UKHCA (or CE	17	
Declaration of Conformity (DoC) for the Kiosk as an integrated system, and a UKHCA (or CE	18	existing Authority or partner owned cabins, for example a change to the design of an inlet
while still allowed) marking.	19	

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5. Performance Management Framework

Table 3 - Key Performance Indicators

Metric	КРІ	What is required to make this measurable	KPI Measurement		KPI Rating	
	KPI 1 -	Invoicing and associated reports	Supply by the contractor of	Does not meet	NA	Meets
	Design/Manufact	for the manufacture and supply of	Acceptance/Delivery check form.	expectations –		Expectations –
	uring/supply	housing is to be provided to the		Housings ordered are		Housings ordered are
ent		Authority when each housing is	Completion of Housings that are	not supplied ready for		manufactured and
Contract Fulfilment	Service Credit 1	complete and ready for	taking longer than the stated	storage/installation		ready for
l Hn:		storage/installation.	lead time at point of order to	within the agreed		storage/installation
ct F			manufacture/supply are to be	timescales. Delays		within the agreed
ıtra		Contractor to maintain in concert	flagged in a tracker.	brought to the		timescales.
Š		with the EA contract manager, an		attention of the		
		up-to-date tracker/database of		Authority and other		
		orders, their progress, and any		affected parties.		
		reasons for delay.				
	KPI 2 - Delivery	Commissioning checks are in place	Commissioning checks are	Does not meet		Meets Expectations –
	and install	to certify successful install and are	completed and documented	expectations –		Housings ordered are
		documented and followed by the	immediately following install,	Housing ordered has		delivered to the site
	Service Credit 1	contractor's management.	and evidence provided to the	not been delivered to		and installed on
Contract Fulfilment			Authority/CMCU	site or install		schedule. Evidence of
<u>E</u>				completed to the		installation is
<u> </u>				agreed timescale. No		provided to the
ct				extension has been		Authority.
ntra				agreed with the		
S				Authority.		
				Commissioning		
				checks have not been		
				carried out as agreed		

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Metric	КРІ	What is required to make this measurable	KPI Measurement		KPI Rating	
Contract Management	KPI-3 Health and Safety Service Credit 2	Ensure that all Employees and Subcontractors are aware of their health and safety obligations. Contractor to follow own CDM risk assessments that they have submitted, and to report any CDM issues to the principal contractor during site work.	Information relating to any new safety incidents or near misses to be provided in contractor meetings. H&S certificates remain up to date and valid.	Environment agency SHEW-COP has not been followed, risk assessments not followed, or staff lacking the correct qualifications on site. H+S Incidents not reported during site work.	NA	Meets Expectations –At contractor meetings, any H&S incidents regarding project work which may have occurred in the previous quarter and all issues are evidenced. SHEW COP has been followed, risk assessments are complete and evidenced.
Sustainability	KPI-4 Net Zero, Sustainability, and Carbon neutrality Service Credit 3	Contractor to maintain sustainability reporting sheets. Sustainability to be an agenda item on authority/contractor meetings for sharing of experiences and innovation.	Reporting sheets completed annually and submitted to the Authority.	Does not meet expectations - Reporting not completed		Reporting completed on schedule.

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- The Contractor shall detail performance against KPI's outlined in Table 3 Key Performance Indicators during Contract meetings, and if required as part of the Issues logs.
- 5.2 KPI's shall be monitored on a regular basis and shall form part of the contract performance review. Performance of KPI's will be reported quarterly and annually.
- Any performance issues highlighted in these reports will be addressed by the Contractor, who shall be required to provide an improvement plan ("Remediation Plan") to address all issues highlighted within a week of the Authority request.
- Performance failure by the Contractor may result in administrative costs to the Authority. Where failure attributable to the Contractor is identified in the Performance Management report and relates to the KPI's then the service credit regime shall apply.
- 5.5 Key Performance Indicators (KPIs) are essential in order to align Contractor's performance with the requirements of the Authority and to do so in a fair and practical way. KPIs have to be realistic and achievable; they also have to be met otherwise indicating that the service is failing to deliver. Without the use of service credits in such a situation, this service failure places strain on the relationship as delivery falls short of agreed levels. As a result, the only recourse would be to terminate and seek alternative supply.
- The use of a strong service credit regime accompanied by a proactive approach to correcting failures and addressing their cause improves the relationship and enables a partnership rather than a confrontational style of working. Its focus is on managing and improving service. It is NOT about taking cost out of the service to the Authority.

5.7 Service Credits

- 5.7.1 The use of Service Credits is governed by the following principles:
 - · Service Credits sit within the wider service management approach being pursued by the Contractor and the Authority. The use of Service Credits does not prejudice the Authority's rights under appropriate clauses of the contract in the event of inadequate performance by the Contractor.
 - The Service Credit regime would be instigated on each occasion where there is a service failure (i.e. where a KPI is identified as having a 'Red' status). This would also give rise to a remediation plan.
 - The Authority has full and complete discretion on whether to claim all, part or none of a Service Credit to which it is due.
 - The full, agreed Service Credit regime shall operate from the initial delivery date until the end of the Contract Period.

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Service credits will be applied as follows:

Service Credit	Description	Value
Service Credit 1: KPI1 and 2 – Supply and Commissioning	Without written clearance by the Authority, a score of Red against KPI 1 or 2 will result in a reduction in value of the relevant invoice sent to the EA after that score was awarded.	The applicable deductions are as follows: • Up to 10% of the value of the relevant contract price prior to invoice (either supply or commissioning)
Service Credit 2: KPI 3 – Health and Safety and reporting	Without written clearance by the Authority, a score of Red against KPI 3 will result in a remediation plan being required to improve health and safety reporting process at the Contract.	No service credit applied – remediation plan only
Service Credit 3: KPI 4 – Sustainability and net zero	Without written clearance by the Authority, a score of Red against KPI 4 will result in a remediation plan being required to improve sustainability reporting process at the Contract.	No service credit applied – remediation plan only

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6. Technical requirements of housings

6.1 Scope of the specification

This section is intended to define the physical parameters of the housings covered by this contract — the general size, shape and construction of the housings, and the fixtures and equipment supplied by the contractor as part of a housing order. The supplier shall in general work to the standard design of housing (outlined in section 6.2.1-.3) with variation in layout and fittings as required. However in some cases - 6.2.2 — fully customised housings that substantially deviate from the basic designs will be required.

Housings shall comply with all applicable Statutory Regulations, Environmental Legislation (including The Waste Electrical and Electronic Equipment Regulations), the relevant Environment Agency procedures/requirements and the latest editions (at the time of Tender) of all applicable British and Harmonised European and international Standards.

In addition, housings must comply with:

- All documents found in Section 13 of this ITT
- Any project specific 'custom requirements' e.g. bespoke claddings/colourings, bespoke housing sizes;
- any other documentation issued by the Authority (unless otherwise agreed, the Environment Agency) as client

Note: Where such documentation imposes additional requirements to the Standards listed in Section 13 the requirements of the specific project documentation take precedence.

Designs are required in the first case to meet or exceed the listed MEICA standards in the Appendices, but if specific project requirements require a *lower* standard, then justification to and approval by the Authority is required in advance.

6.2 Housing description

6.2.1 Extra Large Static Walk in Cabin

Extra large static walk-in cabins have space for multiple gas analysers and PM analysers on racking and benches, in addition to workspace for a technician within the cabin. There is likely to be significant space for future expansion, or space for an additional larger standalone instrument such as an SMPS or an ACSM They are deployed at sites where multiple networks use the same site. They also have greater capacity for future expansion.

The Extra Large Static walk in cabin must meet the MEICA spec and other documents in Section 13 of this ITT, aside from the deviations listed below.

The Large Static Walk in Cabin shall be capable of housing

- up to 2x L40 and 1x L50 cylinders using suitable gas support equipment, and;
- up to 5 gas analysers in racking and;
- 1-2 PM_{2.5} and PM₁₀ analysers on the bench.
- Space for expansion of other networks in future
- Space for 1-2 adults to enter the cabin and work on the equipment.

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The housing may also be required to house meteorological equipment instead of or additional to the above equipment as space allows, without changing the stated volume.

Note: Refer to MEICA spec and other documents in section 13 for all elements of design, aside from the exceptions listed below.

Table 3 Specific requirements beyond or differing from MEICA standards (XL Static Walk in Cabin)

Category	Section Title	Deviation from the MEICA standard above
Construction	Sizing	The cabin dimensions shall be approximately: 2400mm (W) x 2400mm (D) x 2600mm (H) excluding any external fittings such as sample inlet cage. The cabin shall have two access doors, one to the analyser room, and the other to the gas storage area.
Construction	Ingress/Egress of Sample heads	To provide weatherproof access for analyser sampling heads, appropriate glands must be supplied and fitted. Consideration must be given when locating these to permit easy access from the side of the cabin.
		Sample heads shall be enclosed within an anti-vandal sample inlet cage. This should open at the side and at the top allowing for easy access to the analyser inlets/sampler heads and have sufficient height for PM inlets to be removed and zero filters to be fitted. The design is to be provided to CMCU and QA/QC ahead of manufacture for final approval
		Maximum height of the inlet cage shall be no more than 550mm above the top of the cabin
Construction	Roof	Contrary to the MEICA requirements in Appendix 2 the roof must be flat. However, consideration must be given to inlet glands available and their compatibility with analyser sampler heads. Design must also ensure that water cannot pool on the cabin roof. An example sample inlet cage is shown in Appendix 12
Construction	Roof Access	Where access to the roof is required to maintain sampler heads in their cage, tie-off bolts must be mounted at appropriate locations to allow access using best practice (Appendix 8).
		Any requirement to access <i>onto</i> the roof must be designed out – i.e. sample heads and roof furniture should be accessible from the edge without climbing on the roof.
Construction	Roof	While as per below, roof access should not be required or intended, roof must be structurally strong enough to bear human weight in addition to any sample cages etc installed. The intention is to provide resilience in case of vandalism/accidents.
Construction	Structure and Fixings	The kiosks may be placed in locations that may include exposed locations and should be designed to withstand the UK's most extreme weather, including winds of a minimum 120mph gust speed and temperatures of up to of –25 to +40 degrees Celsius. For clarity an SR2 security rating is required from Table 1 in LPS1175 - Issue 8.
Construction	Ladder Restraints	Must be fitted to a recognised standard by a qualified person if being used to secure ladders - EN 795 Class A Anchor Bolt, is considered acceptable, and other standards should be justified

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		if equivalent. There must be a manner of securing a ladder safely to enable safe working	
		Ladder restraints must be fitted in a location that allows access to roof furniture as needed but does not force obstruction of inlet cage access with the ladder.	
Construction	Sound Attenuation	Enclosures will have a minimum of 24dB acoustic performance over centre band frequency range 31.5Hz to 16kHz	
Construction	Colour	'Holly' (see colours in Appendix 4) or the nearest BS standard colour equivalent is suggested as a standard colour for the exterior. Grey or light grey may be acceptable alternatives, especially where there is need for reducing solar gain. A range of colours, or bespoke cladded options must be available to accommodate any local planning permission requirements. Colour to be specified at point of order.	
Construction	Floor	To maintain a fully sealed and weatherproof housing, a floor to the housing is required. It must have sufficient structural strength to allow storage of equipment such as AC units inside the housing prior to housing installation. It will also be structurally strong enough to support all installed equipment and human weight.	
Heating and ventilation	Ventilation requirements – gas storage	 A separate gas cylinder storage shall be designed into the main structure of the cabin, following best practice as outlined in Appendix 9 as a minimum. The responsibility for the design of the ventilation system resides with the Contractor. This storage area will be sealed from the main cabin, and accessed externally via a separate secure door. The space is not intended as a walk-in area, and should not be designed as such. It will be fitted with appropriate gas cylinder restraints and will be lockable. It will have appropriate glands fitted to allow piping into the main cabin 	
Heating and ventilation	Ventilation requirements – gas safety	Venting installed shall be in a location that cannot be obstructed by installed or future equipment. Venting shall be designed in such a way to minimise risks from unexpected releases of gas from equipment or gas cylinders, but also to maintain safe CO2 levels when people are working and breathing within the closed cabin. See Appendix 10 Ventilation shall be provided in both the gas storage area and the main analyser room. The MEICA spec provides guidance referring to CIBSE guidance – which is considered to be CIBSE Applications manual Version 10 Applications Manual 10: Natural ventilation in non-domestic buildings (2005) CIBSE	
Heating and ventilation	Air Conditioning	 A split system, side mounted air conditioning unit should be supplied. 	

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		 The AC unit supplied will have sufficient power to maintain the temperature limits listed in the MEICA specification Appendix 2 This requirement will be determined by the Contractor in concert with CMCU The AC will be fitted on the side of the cabin with an antivandal security cage/sun-shield included. The cage or shield provided is to be easily removed to allow for required servicing and maintenance. Should any specific tools be required to complete the removal of the shield the tools and the instructions are to be provided upon delivery of the housing.
Equipment and fittings	Socket Outlets	Following the design requirements in Appendix 5, 8-12 standard UK 3 pin outlets will be fitted, depending on the configuration of the cabin as set out by CMCU. OPTION: If extra resilience is required, the sockets may include individual RCD socket trips. The intention is to avoid a power anomaly in one piece of equipment shutting down multiple analysers unnecessarily.
		OPTION: If required, a temperature-controlled cut-out will be installed to cut power to the sockets in the event of climate control failure. This is to prevent ancillary electrical equipment such as pumps without built in thermal protection from overheating in the event of an AC failure. In addition to any lightning protection outlined in Appendix 5, surge protectors will be fitted where compatible and following approval from CMCU to protect sensitive equipment from power spikes or surges.
Equipment and fittings	Equipment Shelving	 The cabin shall be of suitable size to allow standard 19" instrument racking of 600mm x 800mm x 1800mm to be installed within the cabin. Housing walls should have sufficient structural strength to support shelving/racking which can hold an analyser weighing 15kg, or have flexibility for floor mounted supports for analysers that need to be positioned near to the roof of the cabin, due to short inlet lengths. As an alternative to racking, shelving may be used if appropriate. Agreement of CMCU of the design will be needed before installation.
Equipment and fittings	Ladders	 A telescopic ladder conforming to BS EN 131 shall be provided Ladder restraint system or fixing system that meets Working at Height regulations (see Appendix 8)
Equipment and	Gas Cylinder	Gas cylinder restraints suitable for L10, L40 and L50 cylinders shall
fittings	Storage	be fitted in the external gas store if required.
Documentation and Labels	Documentation	The wiring shall be supplied with a 'New Installation Condition Certificate' and completed by a NICEIC registered electrician. A "dead test" certificate carried out by a 18th Edition qualified electrical engineer shall also be provided after fit out.

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Documentation and Labels	Drawings	4 Computer Aided Design (CAD) documents per cabin will be required, compliant with MEICA document standards and any other relevant standards • Internal and external layout drawing • On site equipment arrangement model • Electrical Single Line Diagram • Electrical Layout Drawing • Specified foundation to support kiosk (depth, width / height, electricity access point	
		Appendix 11 provides an example document showing minimum standards. Documents to justify design calculations for AC/Ventilation, power draw and heat management shall be provided with each cabin.	
Health and Safety	Fire	A fire extinguisher (2kg CO2) shall be fitted to the inside of one of the cabin doors	
Health and Safety	First Aid	A first aid box which contents complies with BS 8599 and matches the requirements identified through a site risk assessment shall be fitted to the internal of the door.	

6.2.2 Custom Housings

Housings shall be generally supplied to a standard basic design per size category, with modifications to the exterior/interior on a case-by-case basis. These modifications will be based on the local requirements of the site (e.g. doors on a particular side) or internal requirements (e.g. wide access doors to allow larger instrumentation). These requirements will be determined in concert with the CMCU and the Authority.

In the event that the standard designs are not workable, the Authority and its subcontractors managing the Air Quality Monitoring Networks may require bespoke housings to be supplied. Example cases include:

- For a location with specific space requirements or different building materials.
- To include additional space and facilities for the collection of meteorological data. This can
 include instruments using a 15m telescoping meteorological mast, as well as other groundbased instrumentation. The contractor will liaise with any relevant additional stakeholders
 in the design of these more complex cabins.
- For a site design with unusual access requirements e.g. air transportable housing, modular housings to be assembled on site, or roof access as part of the design, for meteorological instrumentation siting.

These custom housings are to adhere to the same standards and basic design principles as the off the shelf housings wherever possible.

- custom housings are to be designed and built on a case-by-case basis; pricing agreed on a similar basis.
- Work on custom housings will be open book costed.

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7. Supply, Delivery and Installation

- 7.1 Supply of a cabin is defined as the supply of a cabin ready for storage or installation and prior to final fit out design and on-site build. In some cases storage may be required while a site is made ready. The delivery acceptance form would be required at this stage.
- 7.2 The following asset label should be attached inside the cabin in a visible location, and the Asset ID must be arranged with the relevant CMCU.



This Equipment is Property of the Environment Agency

Monitoring Contracts Team

Contact - AQmonitoringUK@environment-agency.gov.uk

EA ASSET ID - EA/AURNPM2.5/

- 7.3 Fit-out, installation/commissioning is defined as the fitting out of a cabin including as a minimum key final design points for:
- Shelving positions (width / length / heights / location inside cabin
- Wiring Layouts (Socket / switches / Distribution board)
- Proposed wiring labelling
- Emergency Light Location
- Interior Light Location
- Air Conditioning Unit location and proposed wiring
- Location of Vents
- Location of Inlet heads
- Bench location and height
- Proposed Door and opening direction
- Circuit Power entry location
- Cage design and heights, location
- Location of lifting bolts and ladder storage
- Gas Cylinder storage
- Analyser location on benches and any analyser ancillaries that need to be positioned within the cabin
- Sample line routing

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Following the final fit out and design, installation on site will occur ready for analysers to be activated on their network. The fit out will need to be agreed with Principal Contractor, as per Figure 1. Some items above are best to be installed on site, (for example air conditioning systems) and the Contractor will specify these in their 'Construction Work instruction' and method statements for the final construction work.

- 7.4 Fit-out, installation and commissioning will be carried out within 2 months of a request for a confirmed date from the EA or a CMCU.
- 7.5 The Contractor shall require a normal working instruction (WI) for the delivery of the specific size enclosures, and provide a specialist experienced Haulage Company for the transport and off-loading.
- 7.6 There will be a requirement to agree a delivery plan. This will be developed following a review and assessment of each of the locations using UKAIR site location information, other mapping information, together with a roundtable discussion with CMCU, relevant stakeholders and Contractor's service engineers who have experience at these sites. This will be supplied by the Contractor together with a method statement and risk assessment a minimum of 1 week, prior to the delivery taking place or as agreed with the CMCU contractor.
- 7.7 The contractor will comply with CDM regulations and all EA SHEWCOP requirements outlined elsewhere in this document or the appendices. The SHEWCOP is outlined in Appendix 13
- 7.8 Upon installation Appendix 25, will need to be completed demonstrating the housing has been installed to a good standard.
- 8. Innovation and Net Zero/Environmentalism
 - 8.1 The Authority welcomes innovation, particularly where it aligns towards the Environment Agency's <u>EA2025 plan</u>. The design and supply of the housings specified above should at every stage attempt to minimise impact on the environment. Innovative solutions to working towards net zero and sustainability goals are not formally specified but should be proposed for design into the housings with concurrent goal of futureproofing the network. Examples below:

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- Fitting of solar panels or reservation of space in the internal design to allow solar panels and associated infrastructure like inverters and battery storage to be installed at a later date
- Green roofs and other ways of improving biodiversity and minimising/slowing rainfall runoff.
- Use of recycled or low carbon materials in the construction.
- Integrated ventilation/air conditioning systems that minimise the need for Air Conditioning –
 see section Error! Reference source not found.
 - 8.2 The Environment Agency is reducing its environmental impact both in its direct operations and through its supply chain in the goods, works and services that others provide on its behalf. We are committed to improving our total environmental impact.
 - 8.3 We have an environmental management system (EMS) that is certified to ISO14001:2015 standards which incorporates our procurement and supply chain activities. As part of our EMS, we take a full lifecycle approach to the identification and management of our significant environmental risks and opportunities. Our suppliers have a significant part to play in helping us achieve our commitment to reduce our total environmental impact.
 - 8.4 The Contractor will need to have a management system aligned or certified to ISO14001 accreditation and adopt a similar approach to the lifecycle identification, assessment and management of environmental risks and opportunities associated with the delivery of this contract.
 - 8.5 The Contractors will ensure that at all times they;
 - Achieve compliance with all environmental legislation;
 - Have robust environmental management processes and procedures in place including but not limited to pollution prevention and waste management;
 - Have trained and competent staff to deliver these processes and procedures;
 - Achieve continuous improvement in environmental management; and
 - Work to reduce the environmental impact of delivering this contract.
 - 8.6 The Contractors will include an assessment of the environmental risks and opportunities linked to any recommendations provided in their project risk assessment and in their role in delivering the Contract(s). The Contractor(s) will need to complete the Environment Agency standard contract questionnaire (Appendix 16) and provide environmental risks in their Project Risk assessment (Appendix 17). This is to be completed as part of their Project Management of the Contract.

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- 8.7 The Contractor(s) will encourage the sharing of information, innovation and best practice that will help us to achieve continuous improvement in environmental performance in the delivery of this contract.
- 8.8 The Contractor(s) should seek to ensure the Environment Agency meet its E-mission 2030 ambitions as set out in Appendix *15*
- 8.9 Proposals and innovation regarding operations that can help achieve the targets in Appendix 15 should be communicated to the Authority as soon as possible. Travel and carbon use are considered some of the main sustainability risks. Contractors must minimise travel, use low carbon travel where possible, and use where possible vehicles with low emissions for example Ultra Low Emission Vehicles or Electric Vehicles.
- 8.10 The Environment Agency is looking at ways it can baseline the environmental impact of its contracted work and monitor any improvements made. To this end, we are requiring the Contractor to collect sustainability data in
 - Appendix 20 Sustainability Reporting Requirements
- 8.11 A flexible, resource appropriate approach is required and the contractor is expected to work with the Environment Agency sustainability reporting team. Sustainability reporting is mandatory for the contract.
- 8.12 The reporting excel sheet in Appendix 20 is self-explanatory but data reported should include all the highest impacts of sustainability on the contract including the significant site-based activities, even if there are elements of the work that are sub-contracted. In this supply of goods contract, embedded carbon in housings and other physical items is also to be captured. Omissions to the reporting are by prior agreement with the responsible Agency officer.
- 8.13 If purchasing electronic goods on behalf of the Authority the Contractor(s) should seek to confirm that your suppliers follow the guidelines for bringing electronic equipment to market in the UK following the guidelines at:

https://www.gov.uk/guidance/electrical-and-electronic-equipment-eee-producer-responsibility

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- 8.14 In sourcing the raw materials for goods purchased by the Authority, Contractor(s) must ensure the International Labour Organisation 'Recommendations' applicable in the supply chain for raw materials are being met, latest guidance available on the website (https://www.ilo.org/global/lang--en/index.htm). This includes but is not limited to following guidelines and key sections:
 - Forced Labour
 - Child Labour
 - Working Time
 - Employment security
 - Occupational Health and Safety
- 8.15 The Authority also expects that high standards of Equality, Diversity and Inclusion are met by its Subcontractors. We would expect that our Subcontractors deliver the work on behalf of the Environment Agency in line with the requirements under the Equality Act 2010, and matching our own ambitions to demonstrate the Environment Agency is an equal, diverse and inclusive (EDI) organisation. These expectations are set out to be achieved appropriate to the size and activity of the supply chain given the variety of different organisations in the UKEAP, with an appropriate resource invested regarding implementation of checks against the supply chain. The Contractor must look to take resource appropriate checks and promotion regarding the expectations set out in 8.16. The Contractors must be willing to accept and facilitate an EDI subcontractor audit if required.
- The expectations of our contractors for EDI are therefore to deliver work in a way that:
 - reduces inequalities from socio economic disadvantage;
 - eliminates discrimination;
 - advances equality;
 - fosters good relations (this includes tackling prejudice and promoting understanding);
 - does not discriminate because of a protected characteristic;
 - Provide reasonable adjustments for people with disabilities;
 - Provide services that are accessible to all;
 - Provide maternity equality and pay;
 - Do not victimise employees because of a protected characteristic;
 - Do not enquire about a candidate's health before appointing them;
 - Do not have a pension scheme that discriminates against anyone;
 - Provide equal pay for "like for like" work;
 - Provide positive action to;

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- enable people from or with protected characteristics to overcome or minimise that disadvantage;
- meet their needs;
- enable them to participate in the activity;
- not having a policy of positively discriminating against anyone.
- 8.17 The Environment Agency currently are working to a DEFRA family strategy to improve EDI, and the Contractor and supply chain should seek to share the objectives and ambitions of the current and future iterations of the DEFRA EDI Strategy within its own organisations, or develop an equivalent strategy. The current strategy is located at:

https://www.gov.uk/government/publications/defra-group-equality-diversity-and-inclusion-strategy-2020-to-2024/defra-group-equality-diversity-and-inclusion-strategy-2020-to-2024

- 8.18 The contractor will align with this and future version's as far as reasonably practical to promote shared ambitions and objectives on the EDI strategy.
- 8.19 The Contractor will provide assurance their employees and supply chain workers receive the national living wage.
- 8.20 If during the contract period the contractor is found to have been failing to deliver the expectations for equality, diversity and inclusion, regarding the Equality Act 2010, the Environment Agency may request an improvement programme of measures or contract termination, in line with the stated terms and conditions.

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- 9. Electrical Management
 - 9.1 Before undertaking any electrical works on Environment Agency assets an Electrical Safety Agreement (ESA) must be issued to the Contractor's nominated competent person by the Environment Agency. If not already in place, the Contractor will be expected to work with the Environment Agency to achieve a National ESA within the first three (3) months of contract unless notified by the Environment Agency this is no longer required. Acting in this role the contractor's competent person shall assure and manage electrical safety on the locations and assets the contract is working on.
 - 9.2 The Contractor's ESA will be reviewed every three (3) years.
 - 9.3 The primary purpose of the ESA is to confirm that the Contractor has:
 - A competent person specifically appointed to manage electrical safety for the Contractor and any Subcontractors working on Environment Agency assets. This person must be deemed to be competent to accept an ESA by the Contractor's senior management.
 - A set of Contactor electrical safety rules or Code of Practice equal or better than the Environment Agency's Code of Practice for Electrical Safety (CoPES).
 - 9.4 To be able to be issued with an ESA the Contractor must complete and confirm compliance with all the requirements detailed in the:
 - Appendix 16 EA Standard Contract questionnaire
 - Appendix 18 Electrical Safety Agreement Questionnaire
 - 9.5 The contractor must make particular reference to the conditions section of the CoPES part 2 and the requirements regarding competencies of their organisation and the organisation's employees. The completed questionnaire will be reviewed by the national Mechanical Electrical Instrumentation Control and Automation (MEICA) Senior Manager as part of their assessment in completing the ESA process. If the ESA is not obtained the Environment Agency will reserve the right to re-contract the Electrical Safety Management to other parties who can be approved.

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The Environment Agency reserves the right to audit (at regular intervals) the training and competency levels of contractor's staff and their Subcontractors working on its electrical systems or equipment. This will be conducted by the Environment Agency's ESA issuer for ensuring legal compliance with all legislation that applies to asset management of all equipment. Details of the Environment Agency's latest Code of Practice and supporting documents can be found in:

Appendix 7 Code of Practice for electrical Safety - part 2

10. Warranty terms/Quality assurance

- 10.1 MEICA design requirements outlined in Appendix 2 require a design life for housings of 20 years. Additionally, all housings shall come with a minimum of 5-year structural warranty, for the external walls, roofs, and floors, and the structural, load bearing elements of the enclosure
- All housings will come with a 5-year product fittings warranty (excluding structural load bearing components covered in the structural warranty) and include the following guarantees:
 - Waterproofing elements to prevent ingress of rain water
 - Doors, flooring surfaces and internal non load bearing components.
 - Electrical circuit
 - wiring, consumer units etc
 - Anti-vandal cages and hinges
- The air conditioning units supplied with the housings will be required to have a minimum of 2-year warranty from the point of purchase. The warranty provided for all the above shall include repair works costs completed, replacement parts, replacement and repair of Authority owned equipment damaged by a product failure, and staff costs for the time taken to rectify faults. Warranty works to rectify faults identified during the warranty period are to be completed at no cost to 'The Authority', and within 40 days of the date the defect was noted.
- The supplier of the housings should be registered to a recognised quality system, such as ISO 9001:2015, where the certification body is accredited by either UKAS or an equivalent body from outside the UK, to ISO/IEC 17021, with the expectation that any quality assurance issues with any manufacturing can be correctly addressed. If a supplier's system is made up of several components produced by third party manufacturers, provision of their third-party manufacturers ISO 9001:2015 accreditation or equivalent body certificate would be acceptable (for example, the AC units).

- 11. Construction Design and Management Construction Design and Management Process for New Housings
 - 11.1 It is usual for a new cabin installation to be classified as 'construction' work and therefore the supplier and installer of an air quality cabin will be a 'CDM Designer' and a 'CDM Contractor', as per the terminology in the Construction Design and Management Regulations 2015. This may include any analyser systems and ancillaries existing along with the new supplied with the housings to ensure the layout is as practical as possible for ongoing maintenance. If alternative clients access this contract (for example Welsh Government, they will need to state their own CDM needs to the CDM Contractor, as this section 9 is relevant only when the Environment Agency is the client.

CDM Roles and Responsibilities

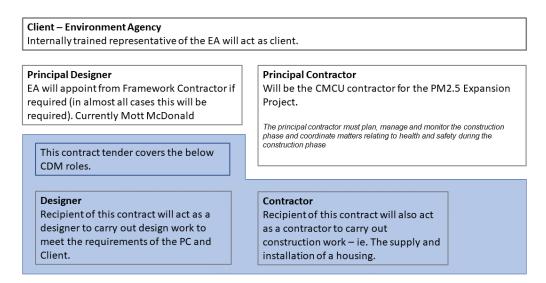


Figure 2 CDM roles and responsibilities. This diagram does **not** exhaustively list all the CDM duties, it is intended only to state the relationships between the supplier of housings and the CDM roles required.

11.2 As per Environment Agency requirements in internal document LIT 16444, each 'person' working on the delivery of the contract can only have a single role, and for this contract that means either being a 'CDM Designer' or a 'CDM Contractor' under CDM. A derogation should be sought if any person is going to undertake both roles.

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- 11.3 The Contractor will comply with and implement minimum standards that meet or exceed the Environment Agency's key requirements contained within the Environment Agency's SHEW COP Appendix 13
- The Contractor will supply suitably qualified staff which must include a relevant construction industry recognised card, and demonstration they are suitably experienced and qualified for the tasks they will complete. This specifically also includes supply of accessories and fittings, such as F-Gas certifications required for working on Air Conditioning systems, as detailed in Appendix 26
- 11.5 The supply of larger housings will require specialist lift equipment, the Contractor will need to specifically demonstrate section 4.29 of the SHEWCOP is met to show that the LOLER regulations must be followed including CPA guidance for the mobile plant used, and the principles of BS 7121.
- 11.6 The process of CDM within the Environment Agency for construction is well established. For Air Quality the Contractor is expected to follow the draft process which includes the key steps of CDM, included in Appendix 14 Draft CDM Processes EA AQ Contractors
- 11.7 The housing and install CDM Designer are required to assist the Principal Contractor throughout the process including ensuring planned, final, and final 'as built' drawings for the installation layout and cabin are supplied. The Principal Contractor will not be technically reviewing the engineering designs, this is for the Contractor to self quality assure. The CDM Principal Contractor and CDM Principal Designer role is to manage and assure via the CDM regulations. Final design risk assessments should also be supplied. During the installation the supplier should provide method risk assessments and complete any necessary permits to work for any high-risk activities, such as working at height. Any changes needed to complete the work must be updated via the Principal Contractor.
- 11.8 As a CDM 'Designer', the Contractor is responsible for the duties outlined in CDM 2015 and Environment Agency procedures, which includes but is not limited to:
- Following the Environment Agency SHEW CoP where relevant
- Co-operate with the Principal CDM Designer and Principal CDM Contractor
- Inform the client of their duties under CDM if relevant
- When preparing or modifying designs, to eliminate, reduce or control foreseeable risks that may arise during the construction, maintenance and use of a structure once it is built
- Utilise the Red Amber Green list detailed in **Appendix 27**. All appraisal options, design concepts and designs that impact the final design solution issued for construction will be formally reviewed against the RAG list by the CDM Principal Designers' reviewer during CDM health and safety process review.
- Provide information to members of the project team to provide their duties

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- Provide evidence of the CDM compliance to the Principal CDM Designer via the Principal CDM Contractor
- Ensuring individuals do not work as a CDM 'Designer and Contractor on each project.
 - 11.9 As a CDM 'Contractor' you will be responsible for:
- Planning, managing and monitor construction work under your control.
- Co-operate, ensure welfare and provide information
- Ensuring reasonable steps are taken to prevent unauthorised access.
- Ensuring workers are consulted and engaged in securing their health and safety;
- Ensuring welfare facilities are provided.
- Ensuring individuals do not work as a 'CDM' Designer and Contractor on each project.
 - 11.10 The Environment Agency is to undertake the role of 'Client' as part of the CDM Regulations 2015. As such it will require information from 'The Contractor' to enable it to perform its' role. This includes information in relation to the 'Cabin Installations', such as providing the information and confirming:
- suitable arrangements are in place, including making sure duty holders are appointed as appropriate and sufficient time and resources are allocated;
- relevant information is prepared and provided to other duty holders, the principal CDM Designer and principal CDM Contractor to carry out their duties;
- welfare facilities are provided;
- engaging impacts with the Principal CDM Designer and Principal CDM Contractor where we as the Environment Agency have a role, for example any invasive species work for construction projects, or waste disposal, where we would expect the Contractor to follow our guidance.
 - 11.11 The contractor is required to act in a CDM designer and CDM Contractor role for the Environment Agency ensuring the project is delivered to agreed timescales for new site projects using suitably qualified staff. Responses to provide necessary drawings and documents should be within 5 working days, excepting delays caused by third parties.

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12. Project Management and Invoicing

- 12.1 Project Management
 - 12.1.1 Oversight of the contract will be carried out by the Authority, with the assistance of the CMCU. Given the high number of orders that are likely to form the first two years of this contract, oversight will include meetings between the Authority, the CMCU and the Contractor at a frequency determined by the authority. Given the rapid pace of housing procurement in 2023-25, it is envisaged that the initial meeting schedule will be fortnightly or similar.
 - 12.1.2 Quarterly oversight meetings will take place at a time agreed by the parties to review KPI performance, sustainability progress and H+S data
 - 12.1.3 The Contractor will maintain and provide the Authority access to an up-to-date tracker/database of orders placed, their progress, and any issues or reasons for delay.
 - 12.1.4 the Contractor will maintain an issues/obligations risk log in an agreed format and will provide the Authority access to the same.
 - 12.1.5 The Contractor will notify the Authority of any changes to key personnel that may affect delivery of the contract. Key Personnel are to be defined prior to commencement of the contract
 - 12.1.6 The Contractor will develop any required Business Continuity Plan (example provided in Appendix 21.) to ensure that the core services delivered in this contract can continue to be delivered in the event of an emergency or major and /or prolonged interruption to function, once highlighted in the Project Management Risk Assessment.
 - 12.1.7 The Contractor shall provide appropriate support to deliver a smooth and efficient hand-over (if required), should they wish to end the contract. This will entail suitable support and provision to enable any new Contractor to take over the installation of assets following purchase, should they wish to exit. The Contractor will maintain a Draft Exit Plan annually and updated if needed. Exit Plan requirements are in the T&C's. As a minimum how assets would be accessible and how purchased equipment warranties and spare parts should be demonstrated.

12.2 Invoicing

- 12.2.1 Invoices for work carried out will be supplied by the contractor in two stages per housing supplied. Each stage will require evidence of the work done in the form of an acceptance/completion form
- 12.2.2 Ancillary, long term (for example: attending meetings throughout the contract or maintaining records) are to be factored into bid costs, and are not paid separately.

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	Invoice covers:	Additional information needed
Invoice 1 Production of cabin ready for storage/install	 Design and manufacturing of housing Supply of fittings/accessories eg. AC units Dead test of electrics Drawings 	Supply acceptance form - Appendix 24, photos of cabin in storage
Invoice 2 Fitting of cabin on site, completion of works.	 Transport of housing to site Installation Fitting out on site Any agreed works on site such as fitting instrumentation 	Commissioning form Appendix 25 and associated photos of completed site

12.2.3 Invoice format

Invoices by the Contractor will be provided within 10 working days an invoice milestone being completed. Invoices will be paid within 30 days of receipt of a correct invoice. They should be sent to the EA contracts team for pre-approval and receipting, and then to the Agency accounts payable account currently:

By email APinvoices-ENV-U@gov.sscl.com

The invoices shall be in PDF format and include:

- i) Unique invoice number;
- ii) Date of issue;
- iii) Purchase order number;
- iv) Date of delivery of services;
- v) Agency contract number;
- vi) The Agency project officer;
- vii) Qualitative description of the work being done
- viii) Excluding VAT unit price and total amount;
- ix) Contractor contact name and details;
- x) Payment information for Contractor;
- xi) Register company information;
- xii) VAT registration number;

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13. List of Appendices

Appendix 1	Meica Specification - General
Appendix 2	Meica Specification - Kiosks and Enclosures
Appendix 3	Meica Specification - Documentation
Appendix 4	Meica Specification - Paints and protection systems
Appendix 5	Meica Specification - Electrical Installations
Appendix 6	Code of Practice for electrical Safety - part 1
Appendix 7	Code of Practice for electrical Safety - part 2
Appendix 8	Safe use of Ladders and Stepladders
Appendix 9 Cylinders	British Compressed Gas Association Code of Practice 44 – Storage of Gas
Appendix 10	AURN Passive Vent Assessment
Appendix 11	Example Layout Diagram
Appendix 12	Example anti-vandal sample inlet cage
Appendix 13	EA Safety Health Environment and Wellbeing Code of Practice SHEWCOR
Appendix 14	Draft CDM Processes EA AQ Contractors
Appendix 15	Environment Agency Net Zero 2030
Appendix 16	EA Standard Contract questionnaire
Appendix 17	Electrical Safety Agreement
Appendix 18	Electrical Safety Agreement Questionnaire
Appendix 19	Example project risk assessment
Appendix 20	Sustainability Reporting Requirements
Appendix 21	Business Continuity Template
Appendix 22	Exit Plan Guidance
Appendix 23	Exit Plan and Template
Appendix 24	Supply acceptance form (sample)
Appendix 25	Installation Acceptance Form (sample)+
Appendix 26	Complying with the F-Gas Regulations

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Appendix 27 Designers' safety, health and environmental Red Amber Green (RAG) list

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