Request for Quotations

RFQ / 2024 / 02

Airconditioning Units

Issue Date: Friday 5 January 2024

RFQ Closing Date: Friday 26 January 2024
Closing Time: ***12:00 CET***

Classification of Document Data: MDB-Public

1 GENERAL INFORMATION

1.1 Introduction

The Malta Development Bank ("the Bank") was established on 24 November 2017 when the Malta Development Bank Act, 2017 came into force (Act No XXI of 2017, CAP 574). It commenced operations on 11 December 2017 when the Board of Directors was appointed and held its first meeting. The MDB is fully owned by the Government of Malta.

The MDB's strategic objective is to address market failures or financial gaps by offering financing facilities to support productive and viable operations where the market is unable or unwilling to accommodate such activities on its own in whole or part. The MDB complements commercial banks through a non-competitive and mutually supportive relationship, thereby ensuring additionality and diversifying Malta's financial base in a cost-effective manner. The MDB's primary goal is to contribute to public policy objectives, and it is therefore not driven by purely commercial and profit maximisation considerations. Nonetheless, the MDB supports only bankable investments and assesses proposals on the basis of sound banking principles, including feasibility.

In performing its promotional banking role, the MDB's remit of activities covers a wide range of possible operations where there is evidence of market failure. In general terms, the MDB is engaged in private sector development; skills and technology, infrastructure development of regional or national importance, green economy, community services.

The Bank's core programme has focused on a guarantee scheme for new SME investments. The Bank also supports large-scale infrastructural projects which experience difficulties in accessing the appropriate bank or other financing.

The COVID-19 pandemic created the need for the MDB to quickly become a key channel of Government's crisis-response measures. Detailed information on the MDB's Covid-19 Guarantee Schemes is provided in the Annual Reports which can be accessed from the bank's website.

1.2 Purpose

1.2.1 The Malta Development Bank (herein referred as "MDB" or the "Bank") performs a promotional role in line with public policy with the objective to contribute towards sustainable economic development that benefits the Maltese people in areas including private sector development, skills and technology, infrastructure development, green economy and community services.

1.2.2 The MDB is currently seeking to acquire Air Conditioning units for several offices at the bank's main premises in Floriana.

2 SUBMISSION OF PROPOSAL

2.1.1 The Bank is the point of contact for this RFQ. Please refer any queries to:

Procurement Officer

Malta Development Bank

5 Market Street

Floriana FRN 1083

Malta.

Telephone: +356 2226 1713

Email: procurement@mdb.org.mt

2.1.2 Applicants are to quote the reference number of this request for quotation in all correspondence.

2.1.3 Proposals shall include the final price, including the delivery to the Bank's premises, the delivery date, the ESPD Form as well as additional information that will allow the MDB to evaluate the proposal according to the defined Evaluation Award Criteria.

2.2 Timetable

	Date	Time (CET)
Publication of RFQ:	5 January 2024	
Clarification Meeting/Site Visit (by appointment):	17 January 2024	10:00
Deadline for request for any clarifications. Any requests for clarifications will only be entertained if received on **procurement@mdb.org.mt by:**	19 January 2024	12:00
Deadline for Submission of Proposals All the documentation shall be submitted to **procurementproposals@mdb.org.mt by:**	26 January 2024	12:00

2.2.1 Any RFQ addenda/updates by the MDB will be circulated by email from procurement@mdb.org.mt and on the MDB website www.mdb.org.mt.

2.2.2 Late submissions will not be accepted. Evaluation of the quotations received will take place after the closing date. The Bank will not assume any liability associated with the late submissions of RFQs. All submissions will be dealt with in the strictest confidence. Any decision taken by the Bank in this regard shall be deemed final.

3 GENERAL CONDITIONS

3.1.1 The Bank shall award the Quotation on the basis of the most economically advantageous proposal in terms as indicated in the paragraph related to the Evaluation Award Criteria.

3.1.2 The Bank may in its absolute discretion change, as deemed necessary in view of circumstances, the basis of, or the procedure of the RFQ process.

3.1.3 The Bank reserves the right to extend the closing date and to cancel the RFQ and evaluation process at any stage. The Bank shall inform all the prospective applicants without being liable for any costs and damages including, without limitation, damages for any loss of profits, in any way connected with the cancellation of the request for quotation.

3.1.4 The Bank reserves the right to reject a proposal which appears to be priced abnormally low in relation to the Services to be provided. The Bank reserves the right to request further clarification, documentary evidence, explanation or elaboration in writing on any aspect of the application or declarations made.

3.1.5 The Bank reserves the right to reject or disqualify a proposal if:

a. the Applicant fails to comply fully with the requirements of the RFQ and the information given at the time of the proposal is incomplete, or additional requested information is not provided;

b. the Applicant is guilty of a serious misrepresentation in supplying any information required in this document and/or in relation to this or any past proposals;

c. the Applicant has, directly or indirectly, engaged in Corruptive, Fraudulent, Collusive or Obstructive practices in competing for the RFQ in question;

d. there is a change in identity, control, financial standing, or other factor impacting on the selection and/or evaluation process affecting the Applicant.

3.1.6 In addition, since the Bank has a zero tolerance towards the commission of fraud, a proposal shall also be rejected if the Applicant fails to commit itself through a signed anti-fraud declaration in the form contained in Annex I.

3.1.7 If the Bank becomes or is made aware, after award of the Project, that an Applicant failed to comply with any of the requesting criteria, the Bank is entitled to terminate the contract without prior notice. The MDB reserves the right to claim payment from the non-compliant Applicant of any damages, loss and expenses incurred as a result of the termination.

3.1.8 Subcontracting and awarding this RFQ in Lots may be accepted after seeking the Bank's prior written consent.

3.1.9 The Bank draws the attention of prospective Applicants to the conditions concerning employment in Malta and the obligation to comply with all regulations, rules or

instructions concerning the conditions of employment of any class of employee. Successful Applicants may also be requested to submit a certified Jobsplus list of personnel employed by them.

3.1.10 The Bank may, notwithstanding any provision to the contrary in this RFQ, publicise or otherwise disclose, to any third party, information regarding the contract, the identity of Applicants (including details of their respective members), the RFQ process, or the award of Services (including, without limitation, details of costs and fees) at any time.

3.2 GDPR and Freedom of Information Compliance

3.2.1 The MDB is subject to the provisions of the Freedom of Information Act as well as other legislation governing access to information. Therefore, where Applicants consider any information that they provide in the course of this RFQ process to be commercially sensitive or confidential in nature, they should identify that information as "commercially sensitive" or "confidential" and specify the applicable reasons. The nature of the documentation may then be taken into account by the MDB in considering requests (if any) for access to such information under the Freedom of Information Act or other applicable law. Applicants should note that on conclusion of a contract for the services that are the subject-matter of this competition, a right of access to the contract and associated documents will be available to the extent required by the Freedom of Information Act 2014 or other applicable law.

3.2.2 The submission of any Personal Data (including any personal data contained in any curriculum vitae) ("Personal Data") shall be provided by the Applicant for the use by the MDB of that Personal Data for the purpose of evaluating the proposals and in performance of arising contractual obligations. Once it obtains any Personal Data, the MDB will act as data controller of such data and will retain it for (a) in respect of an unsuccessful applicant, up to one year following completion of the appointment of the successful applicant and (b) in respect of a successful applicant, up to seven years following completion of the Services. An Applicant may exercise his/her rights in connection with the processing of his/her personal information by MDB by contacting the DPO by email at dpo@mdb.org.mt. For further information in relation to how the MDB processes personal data, including an individual's various rights under data protection law and details of how to contact the MDB, please refer to the MDB's Privacy Notice which is available at: https://www.mdb.org.mt/privacy-policy/ .

4 INFORMATION REQUESTED

4.1 Economic Operator Information

4.1.1 The MDB is asking interested Economic Operators to submit a response containing a signed ESPD Form.

4.2 Requirement Details

Scope

4.2.1 The scope of works includes the design, supply, installation, and commissioning of air conditioning systems within the Malta Development Bank, at 5 Market Street Floriana, as indicated in the relevant drawings, specifications and bill of quantities.

4.2.2 The successful tenderer will be expected to complete all works to a high standard of finish and to collaborate with management of the project so that the project is completed to the desired levels of workmanship and least disruptions to the Bank's operations.

4.2.3 This is a fixed price BOQ, and the rates are assumed to include a complete operational solution, so that the contractor shall understand the full scope of the works and has to prove that the system being proposed is according to best practice and suitable for this project, thus checking/verifying the unit sizing.

4.2.4 Works detailed in the specifications include, but are not limited to, the following:

- Supply and installation of air conditioning systems.
- Design, supply, test and commissioning of air conditioning systems.
- Chase and make penetrations.
- Supply and install pipework, bracketing, fittings, supply and control wiring and related accessories.
- Supply and install air conditioning equipment, grilles, etc.
- Calibrate, set, test, commission and put in operation all related equipment.
- Provide adequate training for the use and maintenance of equipment.
- Handover of systems.

Malta Development Bank Layout

4.2.5 The building is composed of several old residences in which substantial architectural modifications have been made to form an office block. The footprint and layout vary for almost each floor and there are also changes in the floor levels from the stair landing to the offices.

4.2.6 The basement is used for staff areas while all the other levels are used as office areas with a central atrium. At the top floor there is the boardroom and other management offices.

4.2.7 At tender stage the bidder is expected to familiarise himself with the prospective site conditions, by setting up a site visit to ensure that they understand the work area, operations of the bank and allow for provisions for health and safety, work policies and local council requirements.

4.2.8 Suppliers must carefully review the following requirements. For each requirement, indicate whether the proposal complies with the stated criteria. Use the appropriate column to qualify Compliance, Partial Compliance or Noncompliance. A "Yes" in this column will be interpreted as Compliant whilst a "No" will be taken as Noncompliance. Service Providers shall also use the "Supporting comments, evidence and relevant experience" to provide additional information for their submission. Accurate and transparent feedback is crucial for a fair evaluation process. If the RFQ compliance table is not submitted along with your proposal, your proposal will not be considered for evaluation.

		Compliant (Y/N)	Comment
S.1.	**Air Conditioning Systems**		
S.1.1	All the mechanical services shall be installed, tested, and commissioned by an experienced mechanical installation company, which shall employ an HVAC technician/engineer, hereunder referred to as the Engineer, who shall certify the systems which will be in compliance with the relevant specifications. The prospective contractor is to allow in the itemised BOQ to the fact that the works are to be done in coordination with other contractors.		
S.1.2	The design shall be based on the air conditioning drawings as listed hereunder, AC-14-137-23, and AC-15-137-23, FS-14-096-20, and FS-15-096-20		
S.2.	**Electrical Supply**		
S.2.1	All equipment and any switchgear utilised throughout the installation shall be suitable for a 400 Volts three phase, 230 Volts single phase, +/- 10%, 3 phase 4 wire 50 Hz electrical supply. It shall comply with the related B.S. and		

		Compliant (Y/N)	Comment
	E.U. Standards. The incoming electricity supply shall be three-phase, four-wire, 400/230 volts, 50Hz, neutral and earth system. All items making up the electrical installation, such as all equipment, motors, light fittings, control gear, accessories, switchgear, etc. shall be rated to operate at these voltages accordingly.		
S.3.	**Builder's Work**		
S.3.1	The Tenderer is to allow in the rates quoted, unless otherwise specifically requested in the Bill of Quantities, for all chasing, holes in reinforced concrete or structural members, (subject to the approval of the Consultant), penetrations in walls, pipe sleeves and other relevant builder's work necessary for the proper execution of works. Penetrations less or equal to 100mm in stone/bricks and 50mm in concrete shall be deemed to be included in the rates. The tenderer shall also allow for the making good of all chases in walls and holes in concrete with a 3:1 sand/cement mixture, allowing a 3mm recess for final finish by others.		
S.4.	**Noise levels**		
S.4.1	The maximum permitted noise level of each individual equipment shall not exceed 40 dB(A) inside the premises, and for external equipment shall not exceed 65 dB(A). For the board room and CEO offices ultra silent versions are being requested having a noise pressure of less than 31 dB(A). Proof of such low noise pressures is to be submitted with this tender.		

	Compliant (Y/N)	Comment
S.4.2 Outdoor ambient parameters Design ambient conditions shall be as follows, <u>Indoor design condition</u> Summer 24 °C db +/- 1 °C; 60% RH +/- 5% Winter 21 °C db +/- 1 °C; 40% RH +/- 5% Outdoor summer temperature 37°C db 45% RH Outdoor winter temperature 05 °C db 90% RH External pressure shall be assumed to be at sea level, at 1,013 KPa.		
S.5. References S.5.1 The following reference documents are understood to form part of the specifications, to ensure compliance with local regulations. OHSA REWS/EN/BS ASHREA/ HVAC CIBSE/BSRIA		

		Compliant (Y/N)	Comment
S.6.	**Submittals**		
S.6.1	Tendering Stage The tenderers are requested to include technical data sheets which refer to description and model number of the item being offered. Failure to submit such information may lead to rejection of the offer.		
S.6.2	After Award of Tender		
	The contractor shall submit all relevant literature for approval prior to purchasing any equipment or materials for this project. This literature shall include CE marking or certificates of compliance or third-party certification from renowned approving bodies, while all suppliers shall be ISO 9001 certified or equivalent.		
S.6.3	The client's consultant shall reserve the right to inspect any equipment or materials as submitted by the contractor during the review stage of the relevant submittal including the major equipment.		
S.6.4	The client or his consultant reserve the right to ask for a demonstration of the proposed equipment after the award of the tender and prior to purchasing any equipment for this project.		
S.6.5	The engineer shall also hand over a quality plan which shall include, organisation chart, function of employees directly or indirectly involved in the project, safety procedures, method statements for the installation, for inspection, for testing and commissioning, complete with all standard inspection and test sheets before commencing the related works.		

		Compliant (Y/N)	Comment
S.7.	**Material and Equipment**		
S.7.1	All installation equipment, material and components shall be of uniform design, similar parts interchangeable throughout the entire project.		
S.7.2	All external fittings and accessories fitted on the exterior of the building, or which may be exposed to wet ambient conditions, shall be weatherproof, at least IP65, IK08 and if metal, corrosion proof stainless steel AISI 316 back boxes where applicable.		
S.8.	**HVAC Systems**		
S.8.1	Design Concept HVAC The indoor temperature shall be controlled to within a dry bulb temperature of 20 to 24 oC at a relative humidity of 40 to 50%. The air conditioning systems shall be an inverter air cooled; single zone split units with reverse cycle. All systems shall be selected, designed and installed to produce sound pressure levels which would not be of any nuisance to the neighbourhood or indoor staff/clients. The external noise levels are not to exceed the background noise levels of the immediate surrounding areas unless approved. The maximum internal noise level within the occupied spaces must not exceed NR 35. Vibration transmission from the equipment to the building must be eliminated by means of appropriate vibration suppression mountings, spring		

	Compliant (Y/N)	Comment
isolators, flexible, absorbers etc. Such materials shall be supplied with all the equipment and associated cost included in the tendered price.		
S.9. Material and Equipment HVAC		
S.9.1 Materials All installation equipment, materials and components shall be of uniform design, similar parts interchangeable throughout the project. All items and materials not intended for outdoor use shall be stored indoors and protected against damage from work of other trades. They shall also be suitably covered to avoid damaging the finish.		
S.9.2 DC Inverter driven condensing unit The main components of the outdoor units shall be housed in weather-proof enclosure with a finish best suited to withstand all kinds of weather and environmental conditions. Inspection panels shall be easily removable facilitating access to all electrical and mechanical components and controls. The three phase or single-phase motor of the outdoor condensing unit shall be inverter speed controlled, protected by means of a module against phase reversal or phase loss as well as over or under voltage. The units shall include reverse cycle thus incorporating cooling and heat pump. The heat exchanger shall be of multi pass, cross-finned tube, with treated aluminium fins which are mechanically bonded to copper tubes. Aluminium fins shall be pre-treated to withstand harsh saline environment since the installation is close to the shoreline.		

	Compliant (Y/N)	Comment
Units shall preferably have Class A+++ ratings with SEER ≥ 8.5 and SCOP ≥ 5.1. The proposed bid shall not only be assessed on the capital cost of the unit, but also on their running cost given the number of units. Bidders shall demonstrate cost effectiveness of proposed units. Units shall incorporate tropical inverter technology or similar such that the compressor and PCBs are refrigerant cooled and not influenced by ambient temperature to provide higher efficiency. The compressor shall be of the rotary type, mounted on proper anti vibration mountings. Units with R32 or R675 shall be preferred, however R410A refrigerant is also acceptable. Preference shall be given to units incorporating automatic charge function and reluctance brushless DC motor. Outdoor units shall be secured onto suitable metal structures, on cantilevers or uni-struts complete with anti-vibrations mounts in either shafts, or on roofs. Noise level shall not be greater than 65 dB(A) at 1 metre distance.		
S.9.3 Split Unit Construction Units shall have compact and lightweight design to reduce space usage. The unit casing shall be manufactured from polyester powder coated galvanised sheet steel. Outdoor units shall have an additional antirust treatment. The colour finish shall be the manufacturers' finish, normally a light colour finish. Access to the units for routine service and maintenance shall be through the front panel only. For installation purposes only, access to the units shall be via removable panels. Units shall be installed making provision for the		

	Compliant (Y/N)	Comment
minimum space requirements between adjacent units or obstructions, as specified in the manufacturer's data manual. Interconnecting pipe work from indoor units shall be made onto the outdoor unit terminations using brazed connections, or as recommended by the manufacturer. The cooling load capacities of the outdoor units are listed in the Schedule of Rates. The type of outdoor units shall have the following cooling load capacity as follows. OU 1 2.8 KW OU 2 3.5 KW OU 3 5.0 KW OU 4 7.1 KW OU 5 9.3 KW		
S.9.4 Indoor units Indoor units shall be high wall type with Wi Fi capability and controlled via a manufacturer's application from any smart phone. They shall have a low profile and attractive and aesthetically pleasing design. All units shall be supplied with remote controllers, which shall include the following operating buttons: – On / Off – Timer mode start / stop and on / off		

	Compliant (Y/N)	Comment
– Temperature setting – Air flow direction – Operating mode – Fan speed control, including auto All indoor units shall include a removable, washable & mildew proof filter, rapidly removed and easily accessible, on the return air side. Units shall be provided with a condensate pump by the manufacturer, if required. The fans shall be inverter driven for automatic adjustment of air flow rate. Automatic discharge deflection grilles shall be provided on the air outlet to allow for directional control. These shall swing automatically to ensure an even air distribution. Inlet grilles shall be of the fixed direction. These grilles shall be made of high temperature resistant thermoplastic and not warp or discolour with prolonged use. Acoustical and thermal insulation shall be used throughout the indoor unit. Centrifugal fans shall be mounted on self-aligning bearing. Motors shall be silent running, rubber mounted and equipped with thermal overloads.		
S.9.5 Refrigerant Piping and drain The connecting pipework between the indoor and outdoor units shall be carried out using phosphorous deoxidised copper pipes and shall include all necessary branch joints or “refnet” joints as required to be connected the units. All pipework and fittings shall be insulated using 13mm closed cell insulation, unless otherwise specified by the manufacturer. Pipe brackets shall be galvanized steel brackets with rubber inserts. Horizontal runs on the ceiling and shafts, shall be supported on galvanised		

	Compliant (Y/N)	Comment
cable tray or trunking on brackets and mechanically protected by similar means. All necessary drain pipework complete with insulation shall be included in the price. Drains shall be a minimum slope of 1:50 in the direction of the flow and have sufficient cleaning access plugs. Drain pumps shall be fitted where required as per manufacturer requirements.		
S.9.6 Closed Cell Insulation Thermal insulation and surface coating shall be resistant against rotting, mould and fungus growth and attack by vermin. It shall be finished in a smooth, clean, and of workmanlike manner, with all joints tightly finished. Insulation shall be sized according to the pipe diameter. The insulation used shall have a closed cell structure, which has a “built-in‟ vapour barrier with a very high resistance to water vapour transmission. It shall have a surface spread of flame rating to Class 0, an operating temperature range between -40 oC and 105 oC, a thermal conductivity factor of 0.036W/mK at 10 oC and a water vapour transmission resistance value of 5.000. For external installation, the insulation shall be wrapped and painted for proper UV protection.		
S.10. Installation HVAC Please also refer to Installation requirement for Central Plant Room regarding the installation of pipework, painting etc.		

	Compliant (Y/N)	Comment
S.10.1 Power Supply, Control Cabling The contractor is to allow for the wiring from the individual isolators for the outdoor units. The contractor is to allow for the wiring from the outdoor unit to the indoor unit. The control cabling required between the outdoor, indoor units, shall also be included for a complete system. Steel / PVC conduits shall be used for support and mechanical protection for the installation of any control wiring.		
S.10.2 General The contractor shall be responsible to check the actual building dimensions, shape, and other relevant details before to verify that exact location of the indoor unit and its size.		
S.11. Inspections, Testing and Commissioning HVAC		
S.11.1 All the works provided as part of the contract shall be inspected and commissioned in accordance with the relevant European Standard Specifications to the satisfaction of the Consultant Engineer.		
S.11.2 All installations shall be inspected and tested in sections as the works proceeds and on completion as a complete system. It shall be noted that the Engineer may require inspecting and/or testing any equipment during installations. All tests shall be arranged in co-operation with the Consultant and shall be given prior notice of the time, location and nature of the test. No test shall be considered valid unless the Consultant Engineer or his approved representative is present for the tests.		

	Compliant (Y/N)	Comment
S.11.3 Any defects that emerge and found at any time during the test duration shall be amended and a complete re-test shall be carried out, all at no cost to the client but costs shall be fully borne by the contractor.		
S.11.4 No section of the works shall be in any way concealed prior to testing and inspection and written and documented approval by the Consultant or his approved representative.		
S.11.5 The services rendered under this contract exclude: • Any labour cost or parts required as a result of damages caused by accidents, fire, flood, lightning strikes and any other acts of God, neglect, misuse, malicious act, act of violence, environmental conditions outside those specified for or caused by the contracted equipment, electrical current fluctuations not caused by the contracted equipment. • Any maintenance work required due to the use of supplies not approved by the contractor or equipment manufacturer. • Replacement of consumable items.		
S.11.6 The client shall be informed at least one week before any pressure testing, safety testing, function testing, or commissioning is carried out. The contractor's engineer holding a warrant shall approve the test certificates and commissioning certificates and invite the consultant/client to witness such tests; however, the latter has the right to request further tests as deemed necessary.		
S.11.7 Refrigerant pipe work shall be vacuum pressure tested and high pressure tested to 1.5 times the maximum working pressure and as recommended by the equipment supplier.		

	Compliant (Y/N)	Comment
S.11.8 The testing and commissioning of the A/C systems shall strictly follow manufacturer's instructions. In addition, the commissioning data submitted to the Consultant Engineer shall include the following: • External Ambient Temperature • Condenser discharge air temperature • Noise in dB(A) at a distance of 1m from the unit • Absorbed current of the outdoor unit • Noise for the indoor unit from the closest occupied area • All the above with systems operated at full load and with the indoor units' fans set at high		
S.12. Instructions to Employer's Staff		
S.12.1 The employer's staff will be instructed in the operation and maintenance of the installations by qualified personnel, who shall be fully conversant with the operations and maintenance procedures required for all related items of plant and composite systems, and where necessary specialist sub-contractor staff shall be made available to enable complete instructions to be given. The competence of the trainer and the quality of the presentation shall be to the satisfaction of the Consultant Engineer.		
S.12.2 All installations shall be demonstrated in full working order together with the procedures to be adopted in the event of plant or system malfunction and the manner in which plant outputs or control settings can be adjusted		

	Compliant (Y/N)	Comment
S.13. Operation and Maintenance Manuals		
S.13.1 On completion of all the works and prior to handing over, the Contractor, shall provide one (1) electronic copy of the complete set of Operating and Maintenance Manuals comprising the details hereinafter mentioned. The manual shall include general description of the installation, indicting the manner of working of each system, forming part of the works.		
S.13.2 It shall also detail full instructions for starting up, operating and shutting down each individual assembly of the equipment. Instructions as to the frequency and full requirements of routine and regular preventative maintenance necessary to maintain the equipment in a good working condition shall also be included. This information is to be supplemented by the Manufacturer's Maintenance Instructions for each assembly part of the equipment.		
S.13.3 Attached to the manual there shall be a recommended list of spare parts, including manufacturer's address and local stockist/agent as well as wiring diagrams of the system and equipment.		
S.14. Central Plant Equipment		
S.14.1 System Description Central Plant Equipment The Central Plant Equipment, which mainly consist of the air conditioning units which are being proposed to be installed at roof level or within shafts. It is expected that the installation be highly reliable and that it shall operate with maximum quietness.		

	Compliant (Y/N)	Comment
S.15. Material and Equipment		
S.15.1 Electrical equipment and wiring – General The contractor shall be responsible for the accuracy of all wiring diagrams provided by him and for the correct internal wiring of all pre-wired equipment supplied for the contract. Unless otherwise stated, all electrical equipment shall be suitable for use in ambient temperatures up to 45 OC and relative humidity up to 90%.		
S.15.2 Electric Motors All fans, pump and motors shall be continuously rated, with at least Class "E" insulation. All motors shall be an adequate size and type to drive the equipment under all normal conditions of service without overloading. Motors other than light power types shall be 3 phase. Motors arranged for automatic restarting shall be provided with a prominent label of durable material having a clearly inscribed characters the legend: "DANGER, THIS MOTOR IS AUTMOTICALLY CONTROLLED AND MAY START WITHOUT WARNING: ISOLATE BEFORE INSPECTION".		

	Compliant (Y/N)	Comment
S.15.3 Control Gear Contactor operating coils shall be supplied at a voltage not exceeding 240V. Where operation is remotely controlled a protective fuse shall be provided. All starters shall be protected by isolators. The control gear for each motor of more than 300W rating shall include: • Overcurrent released with adjustable time lags for each phase • Under voltage protection and • Emergency "STOP" push button Motors under automatic control shall have starters arranged for automatic restart interruption of the mains supply when full mains voltage is restored. Starters shall normally be rated for intermittent duty and shall be suitable for direct-on-line for motor up to 2hp rating and for star delta starting larger motors. Facilities shall be provided for alternatives hand operation of automatically controlled starters and contactors.		
S.15.4 Supports and Insulation Plastic pipework shall be supporting using manufacturer's approved clip and clipping distances. All metal brackets supporting pipes shall be galvanised. Pipe runs under-floor shall be used as a final option, and in such cases coil type pipes shall be used without any joints under the flooring.		

	Compliant (Y/N)	Comment
Pipes running on the roof and not placed in service ducts shall be adequately supported on flat brackets. The brackets shall be secured to large 9" bricks laid on the roof waterproofing.		
S.15.5 Cleaning and Flushing Out of Systems During the execution of works it is to be ensured that debris, burrs, and other foreign material is kept off from all pipework by adequate protection of open ends. Prior to setting systems to work, all systems shall be thoroughly cleaned up and pipework systems shall be flushed with nitrogen to ensure that all the systems are fit for purpose.		
S.16. Installation		
S.16.1 Materials Except where otherwise stated, materials shall be of the best quality, consistent with the nature of the works and the serves they are employed. All items and materials not intended for outdoor use shall be stored indoors and protected against damage from work of other trades, they shall also be suitably covered to avoid damaging the finish.		
S.16.2 Workmanship Except where otherwise stated, workmanship shall comply with the British Codes of Practice, where applicable. Workmanship shall be of a high standard throughout. The contractor shall ensure that the standard of finish, demanded by this contract is achieved. Branded materials shall be		

	Compliant (Y/N)	Comment
assembled, constructed and joined in accordance with the manufacturer's instruction and recommendations.		
S.16.3 Pipework and fittings All pipework shall be free from surface or general corrosion and without any sign of scaling, pitting or excess weathering. Any pipework so affected will be replaced at no cost to the contract. Each length of pipework shall have at least one coloured identification band or identifying mark, when delivered. All pipework shall be blanked off during the installation to prevent any ingress of dirt or other material which may otherwise block the pipework and the contractor shall be fully responsible to comply with this provision under all circumstances.		
S.16.4 Installation of Pipework All pipework shall be arranged to set round piers and other obstructions and minor modifications shall be made as required by the consultant to circumvent site difficulties. Pipes shall be arranged to follow the contour of walls or beam or other building structure lines and all vertical pipework shall be plumb, without off-sets and set as close as possible to any local projections consistent with maintaining adequate clearances of walls.		

	Compliant (Y/N)	Comment
S.16.5 Pipe Joints and Pipe Sleeves Under no circumstances shall joints be made in the thickness of any wall, floor or ceiling. Pipework shall not be embedded in wall or floors unless specifically directed. Sleeves shall be free of the pipe and cutting shall be reamed, cleaned and trimmed at 90o to the structure. The space between the piping and its sleeves is to be sealed with approved material. Where pipes pass through walls, floors or ceiling, tubular sleeves shall be fitted. These sleeves shall be of a sufficient size to permit the free passage of the pipes through wall, floors and ceilings to ensure that no pipe touches either the sleeve or the building structure. All pipe sleeves shall be set in wall, ceiling and floors before plastering and screed is completed. All pipe sleeves in concealed positions shall be manufactured from a pipe cut-off, formed from the same material as the pipe and shall extend the full thickness of the division through which the pipe is to pass.		
S.16.6 Pipe supports All pipes shall be adequately supported in accordance with the requirements of this specification. All support installations shall be in accordance with relevant British Standard Specification and Codes of Practice. Supports shall allow free movement for expansion or contraction of pipework and shall be located to ensure that pipe branches or fittings are not fouled by the support during expansion or contraction of the pipe.		

	Compliant (Y/N)	Comment
Double banking of pipework from a single support position will be permitted, provided the normal operating temperatures of the fluids in the two pipes do not differ by more than 30oC but only where space restrictions prohibit individual support. Where double banking is necessary, the larger of the two pipes shall be uppermost. Support intervals for double banked pipework of different size shall relate to the smaller size. Vertical rising pipes shall be supported at the base and the support shall withstand the whole weight of the pipe and fluid contained. Supports shall not be permitted which clamp the pipe so that it is in contact with the building fabric of the structure. All support shall be specifically sized for the outside diameter of the pipe concerned including specified packing. Oversized brackets will be rejected. The contractor shall be responsible for marking out, lining up and grading along all pipe routes positioning of anchor blocks, valves and drain cocks and for providing necessary brackets and supports. Where pipes are fitted in ducts or trenches, or when pipes are 65mm bore or greater, supported from wall, the design of the pipes supports should be indicated or detailed for approval of the Consultant.		
S.16.7 List of limits The HVAC contractor shall proceed with his scope of works as per the following details when connecting to other services.		

<table>
<tr><th></th><th>Compliant (Y/N)</th><th>Comment</th></tr>
<tr><td>All other works related to the mechanical installation not detailed in the hereunder or not specifically listed in the BOQ, shall be carried out by the HVAC contractor and shall be assumed to be included in the unit rates.</td><td></td><td></td></tr>
<tr><td>S.16.8 Site Coordination

The mechanical contractor shall liaise with the electricians for the coordination of installation of services and equipment on site to ensure proper access for the installation and maintenance.</td><td></td><td></td></tr>
<tr><td>S.16.9 Electrical Supplies to Pumps and Equipment

The HVAC contractor, shall coordinate with the electrical contractor on the exact final location, type and size of electrical supply points.</td><td></td><td></td></tr>
<tr><td>S.16.10 Defect Liability Period

All installation and equipment shall be covered by a minimum of 36 calendar months from practical completion of the works as certified by the consultant engineer for the defect liability guarantee period.</td><td></td><td></td></tr>
<tr><td>S.16.11 Tender Drawings

The following drawings and documents are deemed to be an integral part of this document:

<table><tr><td>Drawing Title</td><td></td></tr><tr><td>Air Conditioning Systems</td><td>Drawing No</td></tr></table></td><td></td><td></td></tr>
</table>

	Compliant (Y/N)	Comment

Air Conditioning Plan Level 4	AC-14-137-23
Air Conditioning Plan Level 5	AC-15-137-23
Fire Safety Plan Level 4	FS-14-076-20
Fire Safety Plan Level 5	FS-15-076-20

S.16.12 List of literature to be submitted with tender

The list of literature below is deemed to be the minimum accepted literature submittal in order to comply with the requirements of the tender. Tenderers are to give the exact supplier product reference number in the appropriate column and the corresponding item number to be shown on the literature attached.

Failure to provide such information may lead to the tender being rejected.

Item	Description	Reference in Technical Specifications	Supplier reference No
19.01	Split type inverter units	7.2 /7.3/7.4	

4.3 Award Criteria

4.3.1 The award criteria for this Call for Quotations will be based on the following:

Weightings	Evaluation Award Criteria
35%	Compliance with technical requirements
15%	Warranty and support
10%	Experience level of supplier and customer base
40%	Total cost including delivery and installation services

4.4 Response Format

4.4.1 Responses are to be straightforward, clear, concise and specific to the information requested. In order for submissions to be considered complete, the Economic Operator must provide all the requested information mentioned in this document as well as any other comments, observations or suggestions which potentially may assist the MDB in the Request for Quotations.

4.4.2 The response by the Economic Operators shall clearly highlight any clauses where they cannot meet the requirements. It is therefore assumed that if the Economic Operator does not highlight non-compliance, the Economic Operator is complying and is able to execute the requests being made in this specification with the highest standard.

4.4.3 Economic Operators are to ensure that the following documents have been included in their respective proposal:

(i) ESPD Form
(ii) Statement of work / Schedule of works
(iii) Equipment and product details and brochures
(iv) Sample Maintenance Agreement
(v) Financial Bid Form

4.4.4 Economic Operators who fail to provide the requested information shall result in the proposal not being considered any further.

4.5 Financial Bid Form

4.5.1 The proposal price must cover all the works as described in the RFQ document.

4.5.2 The Economic Operator must provide a breakdown of the overall price in Euro (€) including VAT, highlighting the cost per hour.

4.5.3 Different options are to be clearly identifiable and marked 'Option 1', 'Option 2' etc.,

for each individual option clearly outlining the price of the relative option.

4.5.4 If the Economic Operator offers a discount, the discount must be absorbed in the rates listed.

4.5.5 The prices for the contract, must be inclusive of all works to be provided. The prices quoted are fixed and not subject to revision or escalation in costs.

4.5.6 Quotations are to be submitted and shall be awarded including any taxes/charges and any import duties applicable.

Item	Description	Qty	Unit	Unit Rate including VAT €	Total Amount including VAT €
A.1	**HVAC Systems**				
	Supply, transport, install, test and commission the following HVAC systems according to specifications:				
A.2	**Split Unit Systems**				
	Rates to include the required double refrigerant insulated copper pipes complete with branches, insulation, rubber mountings, brackets and supports etc., the required fully lagged drainpipes & control wiring pressure testing, commissioning and remote control. To test and reuse existing drain pipework where available. This is the minimum cooling capacity based on an indoor temperature of 24 deg. CDB, 18.5 deg.CWB and outdoor temperature of 43 deg. CDB				
A.3	Split High wall Unit, complete with outdoor unit, high wall unit, pipework, supply/control wiring and drain type 3 - 5.0kW (super silent version, distance from outdoor to indoor unit LESS than 5m)	1	No		
A.4	Split High wall Unit, complete with outdoor unit, high wall unit, pipework,	2	No		

Item	Description	Qty	Unit	Unit Rate including VAT €	Total Amount including VAT €
	supply/control wiring and drain type 3 - 5.0kW (super silent version, distance from outdoor to indoor unit MORE than 5m)				
A.5	Split High wall Unit, complete with outdoor unit, high wall unit, pipework, supply/control wiring and drain type 4 - 7.1kW (super silent version, distance from outdoor to indoor unit MORE than 5m)	2	No		
A.6	Allow for any cranage, drilling of holes through walls, floors and ceilings, chasing and sealing thereof.	1	Lump Sum		
A.7	Allow for plastic sleeves around pipework in all brick walls & gypsum walls including filling of gap between pipe/insulation & sleeve	1	Lump Sum		
A.8	Allow for protective paint on all external insulation	1	Lump Sum		
A.9	Supply and install the following cable management including all bracketing, fittings and accessories according to drawings and specifications:				
A.10	PVC trunking 25x16mm including covers, corners and edges	rate	m		
A.11	PVC trunking 40x25mm including covers, corners and edges	rate	m		
A.12	Management u-PVC trunking including covers, corners and edges 100x50mm according to drawings and specifications.	20	m		
A.13	Testing and Commissioning of HVAC Installation				

Item	Description	Qty	Unit	Unit Rate including VAT €	Total Amount including VAT €
A.14	Supply of complete hand over documentation signed by Engineer as specified	1	Lump Sum		
A.15	Test, commission and handover systems to client	1	Lump Sum		
	Total				

Annex I

Anti-Fraud Declaration

I, the undersigned, hereby declare that in my official capacity to bind _____[name of company]_____ shall, upon award of this Request for Quotation in relation to the procurement of Airconditioning Units, bind itself to undertake all of the following:

a. not to commit any form of fraud;
b. to take appropriate measures to deter fraud;
c. to introduce and maintain necessary procedures to prevent, detect and deal with suspected fraudulent activity;
d. to report to the Bank all suspected fraud concerning any arrangement entered into with the Bank;
e. if required, to assist the Bank in the investigation of suspected fraudulent activity and in the recovery of wrongfully obtained assets concerning an arrangement entered into with the Bank; and
f. to ensure employees of the company report any suspicion of fraud.

_____

Name:

Designation:

Name of Company:

Date:

MDB guarantees that any personal data processed within this form shall be in accordance with the requirements of local and EU legislation on data protection in force at the time of the data processing including the General Data Protection Regulation- (GDPR) (Regulation (EU) 2016/679. All the personal data collection in this form will be considered under the classification of 'confidential'. Persons have the right to access and port their personal data, rectify, erase and restrict their personal data and to object to processing in terms of the GDPR.

For further information, please read the MDB's privacy notice which can be found here.

--- End of Document ---