Reference number: **MJEG/MPU/84/2020**

Tender for the Supply, Delivery and Installation, Testing and Commissioning of Laboratory Equipment at MCCAA Metrology Directorate

This project is being financed through local budget

Important: No Bid Bond is applicable.

Ministerial Procurement Unit
Ministry for Justice, Equality and Governance
Auberge D'Aragon, Independence Square, Valletta, Malta. Tel +356 22957350 Email tenders.mjcl@gov.mt

Contents

SECTION 1 – INSTRUCTIONS TO TENDERERS

1. General Instructions

1.1 The subject of this contract is TENDER FOR THE SUPPLY, DELIVERY AND INSTALLATION, TESTING AND COMMISSIONING OF LABORATORY EQUIPMENT AT MCCAA METROLOGY DIRECTORATE.

1.2 The place of acceptance of supplies shall be MCCAA, Mizzi House, National Road Blata l-Bajda HMR9010, the time-limits for the execution of the contract shall be (3) three months, and the INCOTERM^{2010} applicable shall be Delivery Duty Paid (DDP).

1.3 The Estimated Procurement Value for this Call for Tenders has been based on comprehensive research including appropriate financial analysis. In the context of this procurement, the Estimated Procurement Value, based on market research, is that of €113,000 excluding VAT.

The purpose of this value shall be the guidance of prospective bidders when submitting their offer and is not to be considered as a binding capping price.

Therefore, the published Estimated Procurement Value is not restrictive and final on the Contracting Authority. Economic Operators are free to submit financial offers above or below the Estimated Procurement Value. However, the Contracting Authority reserves the right to accept or reject Financial Offers exceeding the Estimated Procurement Value.

2. Timetable

The timetable is as per the dates set through the CfT workspace on the ePPS.

3. Lots

3.1 This tender is divided into lots as per the details in the CfT workspace.

4. Clarification Meeting/Site Visit/Workshop

4.1 "An ONLINE (https://teams.microsoft.com/l/meetup-join/19%3ameeting_OTkyY2Q2YTUtNGI1Ni00N2I3LWJiMjctNmMwNzVkOWIzZWZh%40thread.v2/0?context=%7b%22Tid%22%3a%2234cdd9f5-5db8-49bc-acba-01f65cca680d%22%2c%22Oid%22%3a%229f674b7e-d395-43c4-ae88-b8b5b2b4e10c%22%7d) clarification meeting will be held on Wednesday, 20th May 2020 at 10am, to answer any questions on the tender document which have been forwarded in writing, or are raised during the same meeting. Minutes will be taken during the meeting, and these (together with any clarifications in response to written requests which are not addressed during the meeting) shall be posted online as a clarification note as per Clause 6.1 of the General Rules Governing Tendering.

Due to the current exceptional circumstances, bidders who would like to be present for the online meeting are to register their interest not later than 24 hours prior to the date and time of the visit by email on nicola.testa@mccaa.org.mt

Meetings between economic operators and the Contracting Authority, other than that provided in this clause during the tendering period are not permitted.

4.2 The last date on which the Contracting Authority (CA) shall issue a clarification is four days prior to the closing date of the tender, i.e. 1st June 2020.

5. Selection and Award Requirements

In order to be considered eligible for the award of the contract, economic operators must provide evidence that they meet or exceed certain minimum criteria described hereunder.

(A) Eligibility Criteria

Economic Operators are to complete the Eligibility Section through the tender response format (Note 2)

(B) Exclusion (including Blacklisting) and Selection Criteria – information to be submitted through the tender response format (available from www.etenders.gov.mt). (Note 2)

(i) Confirmation that the bidder and any sub-contractors (if any) engaged throughout the execution of the contract do not fall under the any of the grounds listed under Part VI of LN352/2016 concerning exclusion grounds including blacklisting through the tender response format.

(ii) Declaration concerning Selection Criteria

(If applicable)
Provide the name/s of subcontractor/s and the relative percentage of supplies to be subcontracted. This information is to be submitted online through the tender response format. *(Note 2)*

It is being understood that if the information being requested regarding sub-contracting is left empty, it will be assumed that no sub-contracting will take place (0% subcontracting).

(C) Specifications

(i) Tenderer's Technical Offer in response to specifications to be submitted online through the prescribed Tender Response Format and by using the Tender Preparation Tool provided. (Note 3)

(ii) **Literature** as per Form marked 'Literature List' is to be submitted with the technical offer at tendering stage. Alternatively, an Economic Operator can quote

a reference number under which he/she has already supplied items so that there would be no need to submit literature. (Note 2)

(D) Financial Offer

(i) A financial offer calculated on the basis of **Delivered Duty Paid (DDP) 2010 (Grand Total)** for the supplies tendered as per Tender Response Format [inclusive of training as applicable]. (Note 3)

Lot 1 and Lot 3: One (1) day of dedicated training on the equipment by certified professionals/company representatives in Malta for at least two members of the staff using the equipment. Training shall cover setting up of the equipment, full operation, routine maintenance and full use of the software suite. Training is to be held by not later than two weeks after commissioning of the equipment, following which guarantee period will commence. All training expenses shall be borne by the Contractor.
No training shall be provided for Lots 2, 4, 5 and 6].

(ii) A filled-in Financial Bid Form (as per document available to download online from www.etenders.gov.mt) as per Tender Response Format. (Note 3)

In case of any discrepancy between the information provided in the Financial Bid Form and the grand total in the tender response format (xml tender structure), the latter shall prevail. This condition shall not apply to the financial bid forms constituting of a Bill of Quantities (BoQ) or financial bid forms where the total can be arithmetically worked out and corrected, as necessary and when applicable.

Notes to Clause 5:

1. Not applicable for departmental tenders.

2. Tenderers will be requested to either clarify/rectify any incorrect and/or incomplete documentation, and/or submit any missing documents within five (5) working days from notification.

All Rectifications are free of charge.

3. No rectification shall be allowed. Only clarifications on the submitted information may be requested.

Requests for Clarifications and/or Rectifications concerning a previous request dealing with the same shortcoming shall not be entertained.

6. Criteria for Award

6.1 The sole award criterion will be the price. The contract will be awarded to the tenderer submitting the cheapest priced offer satisfying the administrative and technical criteria.

SECTION 2 – SPECIAL CONDITIONS

These conditions amplify and supplement, if necessary, the General Conditions governing the contract. Unless the Special Conditions provide otherwise, those General Conditions remain fully applicable. The numbering of the Articles of the Special Conditions is not consecutive but follows the numbering of the Articles of the General Conditions. Other Special Conditions may be indicated afterwards.

Article 2: Law Applicable and Language of the Contract

2.1 The laws of Malta shall apply in all matters not covered by the provisions of the contract.

2.2 The language used shall be English.

Article 3: Order of Precedence of Contract Documents

3.1 The contract is made up of the following documents, in order of precedence:

(a) the Contract;
(b) the Special Conditions;
(c) the General Conditions;
(d) the Contracting Authority's technical specifications and design documentation;
(e) the Contractor's technical offer, and the design documentation (drawings);
(f) the financial bid form (after arithmetical corrections)/breakdown;
(g) the tender declarations in the Tender Response Format;
(h) any other documents forming part of the contract.

Addenda have the order of precedence of the document they are modifying.

Article 4: Communications

4.1 Further to what is stated in the General Conditions, any communication should be made on:

Director Finance
MCCAA, Mizzi House,
National Road, Blata l-Bajda HMR9010

Email: ian.alamango@mccaa.org.mt or
Email: procurement.mccaa@mccaa.org.mt

Article 7: Supply of Documents

7.4 Not Applicable

Article 8: Assistance with Local Regulations

As per General Conditions

Article 9: The Contractor's Obligations

9.6 Sub-Article 9.6 is not applicable for Malta Funds.

Article 10: Origin

As per General Conditions

Article 11: Performance Guarantee

11.1 The Contractor shall, within 15 calendar days of receipt of the contract, sign and date the contract and return it together with a copy of the Performance Guarantee. The copy of the Performance Guarantee forwarded to the Central Government Authority is to be endorsed by the Contracting Authority prior to submission. The contract will not be endorsed by the Contracting Authority/Central Government Authority until the performance guarantee is submitted. The Contractor is therefore obliged to forward the original Performance Guarantee to the Contracting Authority. The amount of the guarantee shall be 4% where the amount of the total contract value is between €10,000 and €500,000 exclusive of VAT, and 10% where the amount of the total contract value is €500,000 or above.

If a Procurement Procedure was published with lots and subsequently awarded accordingly, each lot shall be regarded as a separate contract, even if the same contractor wins more than one (1) lot. As a result, the amount of the Performance Guarantee shall be calculated per lot.

Economic Operators have the possibility to provide the Contracting Authority with a Single Bond covering the performance guarantees for all the contracts with the same Contracting Authority. If an additional contract is awarded to a given contractor, which results in an economic operator's current cumulative contracts value to go beyond the contract value range currently covered by the Single Bond, the contractor is to be requested to; either submit a separate Performance Guarantee for the additional contract; or else submit a new Single Bond to cover the new total contracts value or submit an amendment to the original Single Bond specifying the new amount. If an Economic Operator chooses to make use of the Single Bond, he must submit a letter from the respective Contracting Authority specifying that the amount of the Single Bond covers the new Contract, otherwise the new Contract Agreement would not be signed.

11.3 The performance guarantee shall be in the format given in Section 5 and shall be provided in the form of a bank guarantee.

11.7 50% of the performance guarantee shall be released within 30 days from Provisional Acceptance and the remaining 50% shall be released within 30 days of the Final Acceptance Certificate.

Article 12: Insurance

12.1 All Risks Insurance:

The Contractor shall take an insurance policy to cover the carriage of supplies.'

12.2 Notwithstanding the Contractor's obligation under article 12.1, the Contractor shall bear all sole liability for, and indemnify the Contracting Authority and the Project Leader against any claims by third parties for damage to property or personal injuries arising from the execution of the contract by the Contractor, his subcontractor and their employees.

Article 13: Performance Programme (Timetable)

Not Applicable

Article 14: Contractor's Drawings/Diagrams

14.1 Further to what is stated in the General Conditions, the Contractor is to provide for All Lots, Manuals in one (1) soft and two (2) hard version, and these should be fully descriptive. The tenderer shall also supply the Contracting Authority with basic operational procedures, serving as a quick operational guide. All documentation is to be approved by the Project Manager.

14.7 Further to what is stated in the General Conditions, the Manuals stated in Article 14.1, should be in the English Language.

Article 15: Tender Prices

As per General Conditions

Article 16: Tax and Customs Arrangements

As per General Conditions

Article 17: Patents and Licences

As per General Conditions

Article 18: Commencement Order

18.1 The contract shall commence from the order to provide supplies. Supplies requested in this contract are to be delivered by not later than six (6) months from the order to provide supplies. This is applicable to all lots.

Article 19: Period of Execution of Tasks

19.1 Supplies requested in this contract are to be delivered by not later than six (6) months from the order to provide supplies. This applies to all Lots.

Article 22: Modification to the Contract

Not Applicable

Article 24: Quality of Supplies

As per General Conditions

Article 25: Inspection and Testing

25.2 Further to what is stated in the General Conditions - All goods delivered (for each lot) by the contractor shall be inspected and tested by the Project Manager at Kordin Business Incubation Centre, Corradino L/O Paola, Malta

Article 26: Methods of Payment

26.1 Payments will be made in Euro.

Payments shall be authorized and paid by the Contracting Authority upon receiving a valid fiscal invoice indicating the description and the lot of the item. For each item, provided that the same item has been inspected and tested by the Project Manager and certified to be compliant, payment will be issued.

26.3 As per General Conditions.

26.7 Not Applicable.

26.9 As per General Conditions

Article 28: Delayed Payments

28.1 The Contracting Authority shall pay the contractor sums due within 30 days of the date on which an admissible payment is registered, in accordance with Article 26 of these Special Conditions. This period shall begin to run from the approval of these documents by the competent department referred to in Article 26.1 of these Special Conditions. These documents shall be approved either expressly or tacitly, in the absence of any written reaction in the 30 days following their receipt accompanied by the requisite documents.

28.2 Once the deadline laid down in Article 28.1 has expired, the Contractor may, within two (2) months of late payment, claim late-payment interest:

a) meaning simple interest for late payment at a rate which is equal to the sum of the reference rate and at least eight percent (8%);
b) on the first day of the month in which the deadline expired.

The late-payment interest shall apply to the time which elapses between the date of the payment deadline (exclusive) and the date on which the Contracting Authority's account is debited (inclusive).

Article 29: Delivery

29.1 Further to the provisions of the General Conditions, the Contractor shall bear all risks relating to the supplies until provisional acceptance at destination. The supplies shall be packaged so as to prevent their damage or deterioration in transit to their destination.

29.2 All equipment shall be packed in such a way to avoid any damages to the supplies during transit to the final destination.

29.3 The packaging shall remain the property of the Contractor subject to respect for the environment.

29.5 Each delivery is to be accompanied by a packing list and other delivery documents

29.6 Each package shall be clearly marked to indicate the brand, model and item accordingly.

Article 31: Provisional Acceptance

31.1 The supplies shall be taken over by the Contracting Authority upon delivery according the contract, and have passed the requested tests satisfactorily, and a certificate of provisional acceptance has been issued by the Project Manager.

Article 32: Warranty

32.1 Further to what is stated in the General Conditions, this warranty shall remain valid for two (2) years after provisional acceptance on all parts and labour. This applies for each lot.

32.6 Not Applicable

Article 33: After-Sales Service

Not Applicable

Article 35: Breach of Contract

35.3 Without prejudice to the Government’s right to dissolve ‘ipso jure’ the contract in the case of infringement of any condition thereunder and apart from the deduction established for delay in delivery, any such infringement shall render the contractor, in each case, liable to a deduction by way of damages of 5 per cent of the value of the contract, unless the Government elects, with regard to each particular infringement, but not necessarily with regard to all infringements, to claim actual damages incurred.

Article 37: Termination by the Contractor

37.1 (a) As per General Conditions.

Article 41: Dispute Settlement by Litigation

41.1

If no settlement is reached within 120 days of the start of the amicable dispute-settlement procedure, each Party may seek:

(a) either a ruling from a national court, or

(b) an arbitration ruling, in the case where the parties i.e. the contracting Authority and the Contractor, by agreement decide to refer the matter to arbitration.

SECTION 3 – TECHNICAL SPECIFICATIONS (Note 3)

Note: Where in this tender document a standard, brand or label is quoted, it is to be understood that the Contracting Authority will accept equivalent standards, brands or labels. However, it will be the responsibility of the respective bidders to prove that the standards, brands or labels they quoted are equivalent to the standards requested by the Contracting Authority.

1. LOT 1

1.1. Temperature Calibration Chamber

Qty: 1
Technical Specifications

SPECIFICATION	
1.1.1.	**Specifically designed for metrology and calibration applications;**
1.1.2.	**Temperature working range covering at least [-70°C to +150°C];**
1.1.3.	**Supplied with all the necessary accessories and components to operate it, continuously and in an uncontrolled manner, over its full range;**
1.1.4.	**Mounted on wheels, or on trolley with wheels, stationary lockable;**
1.1.5.	**Internal test space:**
1.1.5.A.	*such that* $100L \leq Volume \leq 120L$ *(with dimensions more-or-less uniformly distributed over the three spatial directions),*
1.1.5.B.	*made of stainless-steel,*
1.1.5.C.	*easy to clean,*
1.1.5.D.	*with illumination;*
1.1.6.	**Door:**
1.1.6.A.	*with window,*
1.1.6.B.	*lockable,*
1.1.6.C.	*opening left (clockwise);*
1.1.7.	**Access port:**
1.1.7.A.	*Qty 1,*
1.1.7.B.	*right side,*
1.1.7.C.	*50 mm ≤ ∅ ≤ 80 mm,*
1.1.7.D.	*w/sealing plug (Qty 3);*
1.1.8.	**Fan-assisted air circulation;**
1.1.9.	**Furnished with at least 2 shelves wire-type;**

1.1.10.	**Powered on 1/N/PE 240 V AC 50 Hz and fitted with a suitable power connector plug to IEC 60309 (16A, 200-250V, 50/60Hz 6H, 2P+E, compatible with GEWISS® GW 66-204 socket outlet)**
1.1.11.	**Air-cooled refrigeration unit;**
1.1.12.	**Chloride-free refrigerant R449A;**
1.1.13.	**Condensation protection;**
1.1.14.	**Such that, once all dismountable components have been removed, installation at the intended location, access to which is through a door aperture 1950mm-high and 850mm-wide, be possible. Any alterations to the door aperture, eventually necessary to make the proposed model pass through it, should be accounted for and included in the offer;**
1.1.15.	**Heating rate (IEC 60068-3-5) ≥ 3.5°C/min;**
1.1.16.	**Cooling rate (IEC 60068-3-5) ≥ 3°C/min;**
1.1.17.	**Temperature stability -STAB - over the working range:**
1.1.17.A.	*Best case: |STAB| ≤ 0.2°C,*
1.1.17.B.	*Worst case: |STAB| ≤ 0.5°C;*
1.1.18.	**Temperature homogeneity - HOM - over the working range:**
1.1.18.A.	*Best case: |HOM|≤ 0.5°C,*
1.1.18.B.	*Worst case: |HOM| ≤ 1.5°C;*
1.1.19.	**Equipped with**
1.1.19.A.	*a digital control system, with touchscreen display, to achieve the requested temperature control, including, at least:*
1.1.19.A.i.	programming of temperature set-points and sequences with ramp-and-soak times between each point,
1.1.19.A.ii.	graphical display showing the mode of operation of the unit,
1.1.19.A.iii.	numerical and graphical visualization of process parameters,
1.1.19.A.iv.	a protection system against overtemperature in the chamber,
1.1.19.A.v.	programming of temperature limiters;
1.1.19.B.	*a serial interface able to be connected to a laptop computer with a USB (2.0) port (adaptors, if necessary, to be included);*
1.1.20.	**Software, if included, to be:**
1.1.20.A.	*one-time license,*
1.1.20.B.	*compatible at least with MS® Windows 10;*
1.1.21.	**Compliant with EMC and Low-Voltage EU Directives;**
1.1.22.	**Whole system to be covered by a full two-year warranty, including parts and labor;**
1.1.23.	**Any consumables required to be clearly outlined in the offer;**
1.1.24.	**Potential tenderers are not allowed to offer this specification text as the**

sole descriptor of their proposal. An "as-requested" and an "as-offered" reply must be made, accompanied by product specifications and product numbers, diagrams or pictures of the proposed solutions, together with the unit price for each item;

2. LOT 2

2.1. High-Temperature Dry-Block Calibrator

Qty: 1
Technical Specifications

SPECIFICATION	
2.1.1.	**Suitable for calibration applications – both in the lab and on-site, outside the lab –, as a comparator, in conjunction with external reference thermometers (not object of this call);**
2.1.2.	**Temperature working range (at ambient temperature) covering at least the interval [50˚C to 600˚C];**
2.1.3.	**Operating environmental conditions at least [0˚C to 40˚C] and [40% to 80%RH];**
2.1.4.	**Display/Setting resolution 0.01˚C or better;**
2.1.5.	**Heating time (min to max Range) ≤ 1h;**
2.1.6.	**Cooling time (max to min Range) ≤ 4h;**
2.1.7.	**Powered on a 230 V (±10%), 50/60 Hz and fitted with power connection suitable for use in Malta;**
2.1.8.	**Temperature stability – STAB – over the working range:**
2.1.8.A.	*Best case: |STAB| ≤ 5mK*
2.1.8.B.	*Worst case: |STAB| ≤ 30mK*
2.1.9.	**Temperature (axial) homogeneity – AXHOM – over the working range:**
2.1.9.A.	*Best case: |AXHOM| ≤ 100mK*
2.1.9.B.	*Worst case: |AXHOM| ≤ 400mK*
2.1.10.	**Temperature (radial) homogeneity – RADHOM – over the working range (Temperature difference between borings)**
2.1.10.A.	*Best case: |RADHOM| ≤ 10mK*
2.1.10.B.	*Worst case: |RADHOM| ≤ 40mK*
2.1.11.	**Loading Effect – LOEFF – over the working range:**
2.1.11.A.	*Best case: |LOEFF| ≤ 20mK*
2.1.11.B.	*Worst case: |LOEFF| ≤ 40mK*
2.1.12.	**Equipped with:**
2.1.12.A.	*a built-in digital control system to configure the unit and achieve the desired temperature control, at least including:*
2.1.12.A.i.	programming of set-point sequences with ramp-and-soak times between each point,
2.1.12.A.ii.	graphical display showing the mode of operation of the unit,
2.1.12.A.iii.	numerical and/or graphical visualization of process parameters,

2.1.12.A.iv.	protection against under/over–temperature in the block,
2.1.12.A.v.	calibration/adjustment procedure of the unit;
2.1.12.B.	*a serial interface, able to be connected to a laptop computer with a USB (2.0) port (adaptors, if necessary, to be included);*
2.1.13.	**Supplied with the following multi-bore inserts:**
2.1.13.A.	*Insert no. 1 – ¼'', ¼'' (diametrically opposed), 3/16'', 3/16'', 1/8'', 1/8'' ∅,*
2.1.13.B.	*Insert no. 2 – ¼'', ¼'' (diametrically opposed), 3mm, 4mm, 5mm, 6mm ∅,*
2.1.13.C.	*Insert no. 3 – ¼'', ¼'' (diametrically opposed), 5/16'' 7mm, 8mm, 9mm ∅;*
2.1.14.	**The depth of the wells in each insert to be ≥ 180mm and ≤ 210mm:**
2.1.15.	**Compliant with EMC and Low-Voltage EU Directives;**
2.1.16.	**Unit to be covered by a full two-year warranty, including parts and labour;**
2.1.17.	**Potential tenderers are not allowed to offer this specification text as the sole descriptor of their proposal. An "as-requested" and an "as-offered" reply must be made, accompanied by product specifications and product numbers, diagrams or pictures of the proposed solutions, together with the unit price for each item;**

2.2. Low-Temperature Dry-Block Calibrator

Qty: 1
Technical Specifications

SPECIFICATION	
2.2.1.	**Suitable for calibration applications – both in the lab and on-site, outside the lab –, as a comparator, in conjunction with external reference thermometers (not object of this call);**
2.2.2.	**Temperature working range (at ambient temperature) covering at least the interval [-40˚C to 100˚C];**
2.2.3.	**Operating environmental conditions at least [0˚C to 40˚C] and [40% to 80%RH];**
2.2.4.	**Display/Setting resolution 0.01˚C or better;**
2.2.5.	**Heating time (min to max Range) ≤ 1h;**
2.2.6.	**Cooling time (max to min Range) ≤ 1h;**
2.2.7.	**Powered on a 230 V (±10%), 50/60 Hz and fitted with power connection suitable for use in Malta;**
2.2.8.	**Temperature stability – STAB – over the working range:**
2.2.8.A.	*Best case: |STAB| ≤ 5mK*
2.2.8.B.	*Worst case: |STAB| ≤ 5mK*
2.2.9.	**Temperature (axial) homogeneity – AXHOM – over the working range:**
2.2.9.A.	*Best case: |AXHOM| ≤ 20mK*
2.2.9.B.	*Worst case: |AXHOM| ≤ 100mK*
2.2.10.	**Temperature (radial) homogeneity - RADHOM - over the working range (Temperature difference between borings)**
2.2.10.A.	*Best case: |RADHOM| ≤ 10mK*
2.2.10.B.	*Worst case: |RADHOM| ≤ 10mK*
2.2.11.	**Loading Effect – LOEFF – over the working range:**
2.2.11.A.	*Best case: |LOEFF| ≤ 5mK*
2.2.11.B.	*Worst case: |LOEFF| ≤ 20mK*
2.2.12.	**Equipped with:**
2.2.12.A.	*a built-in digital control system to configure the unit and achieve the desired temperature control, at least including:*
2.2.12.A.i.	programming of set-point sequences with ramp-and-soak times between each point,
2.2.12.A.ii.	graphical display showing the mode of operation of the unit,
2.2.12.A.iii.	numerical and/or graphical visualization of process parameters,
2.2.12.A.iv.	protection against under/over-temperature in the block,

2.2.12.A.v.	calibration/adjustment procedure of the unit;
2.2.12.B.	*a serial interface, able to be connected to a laptop computer with a USB (2.0) port (adaptors, if necessary, to be included);*
2.2.13.	**Supplied with the following multi-bore inserts:**
2.2.13.A.	*Insert no. 1 – ¼'', ¼'' (diametrically opposed), 3/16'', 3/16'', 1/8'', 1/8'' ∅,*
2.2.13.B.	*Insert no. 2 – ¼'', ¼'' (diametrically opposed), 3mm, 4mm, 5mm, 6mm ∅,*
2.2.13.C.	*Insert no. 3 – ¼'', ¼'' (diametrically opposed), 5/16'' 7mm, 8mm, 9mm ∅;*
2.2.14.	**The depth of the wells in each insert to be ≥ 150mm and ≤ 180mm:**
2.2.15.	**Compliant with EMC and Low-Voltage EU Directives;**
2.2.16.	**Unit to be covered by a full two-year warranty, including parts and labour;**
2.2.17.	**Potential tenderers are not allowed to offer this specification text as the sole descriptor of their proposal. An "as-requested" and an "as-offered" reply must be made, accompanied by product specifications and product numbers, diagrams or pictures of the proposed solutions, together with the unit price for each item;**

3. LOT 3

3.1. Precision, close-control A/C units

Qty: 2
Technical Specifications

	SPECIFICATION
3.1.1.	**Suitable to realize and maintain adequate climatic conditions in Laboratories for the reproduction and the conservation of National Measurement Standards of Mass and Length, in-line with International requirements and recommendations;**
3.1.2.	**Physical assembly and dimensions compatible with the ones currently in-service at the DIRECTORATE, to ensure no or minimal alterations to the existing structure/environment;**
3.1.3.	**Any alteration to the current structure/environment eventually necessary to install and make the unit operative is to be evaluated in advance and its cost included in the offer;**
3.1.4.	**Floor-mounted;**
3.1.5.	**Up-flow mode of operation;**
3.1.6.	**Equipped with a digital control system to achieve the requested temperature/humidity control. Control panel to include at least:**
3.1.6.A.	*keys for unit operation and programming of temperature and humidity set-points,*
3.1.6.B.	*graphical display showing the mode of operation of the unit,*
3.1.6.C.	*numerical and graphical visualization of process parameters,*
3.1.6.D.	*data-logging capability and facility to transfer logged data to any type of computer for record and monitoring purposes;*
3.1.7.	**Able to operate continuously, on 24/7 hour basis;**
3.1.8.	**Fitted with:**
3.1.8.A.	*a smokestat and a firestat to shut down the air-conditioning system in the event of smoke being detected in the air system and in the event of an abnormally high return air temperature or temperature gradient;*
3.1.8.B.	*an alarm with mute switch for heater cutout, fan fail, cooling trip and humidifier bottle change;*
3.1.9.	**Temperature Set-ability: 0.1 °C, over at least the range (15-35°C);**
3.1.10.	**Humidity Set-ability: 0.1%RH, over at least the range (30-70%RH);**
3.1.11.	**Fresh air content: 15-20%;**
3.1.12.	**Filters to be mounted on both the supply and return air sides to provide filtration of the recirculated air to obtain the required degree of cleanliness of the air in the laboratory. Filtration to be provided by Class EU4 or equivalent filters and of the type that permit rapid changing without the danger of dust dispersal;**
3.1.13.	**After installation, environment conditions in the lab to be monitored for 10 consecutive days. Data to be recorded to ascertain that it can maintain the following**

	indoor year-round conditions which should be demonstrated during commissioning;
3.1.13.A.	*Max $\lvert\Delta T\rvert$ /1hr ≤ ± 0.2˚C,*
3.1.13.B.	*Max $\lvert\Delta T\rvert$ /4hrs ≤ ± 0.3˚C,*
3.1.13.C.	*Max $\lvert\Delta T\rvert$ /24hrs ≤ ± 0.5˚C,*
3.1.13.D.	*Max $\lvert\Delta T\rvert$ /X (horizontal temperature gradient) ≤ ± 0.1˚C/m,*
3.1.13.E.	*Max $\lvert\Delta T\rvert$ /Z (vertical temperature gradient) ≤ ± 0.2˚C/m,*
3.1.13.F.	*$\lvert\Delta H\rvert$ /4hrs ≤ ± 5%RH;*
3.1.14.	**Covered by a full two-year warranty, including parts and labour;**
3.1.15.	**Potential tenderers are not allowed to offer this specification text as the sole descriptor of their proposal. An "as-requested" and an "as-offered" reply must be made, accompanied by product specifications and product numbers, diagrams or pictures of the proposed solutions, together with the unit price for each item;**
3.1.16.	**All PC software to be compatible at least with MS® Windows 10.**

4. LOT 4

4.1. Angled-stem Secondary Reference Platinum Resistance Thermometer

Qty: 2
Technical Specifications

SPECIFICATION	
4.1.1.	**Suitable for metrology and calibration applications as a reference in a dry-block calibrator when the unit to be calibrated has a terminal head fitted that would obstruct a longer, straight stem geometry reference thermometer;**
4.1.2.	**Temperature range at least [-200˚C to 500˚C];**
4.1.3.	**90˚-angled stem geometry;**
4.1.4.	**Stem ∅ = ¼";**
4.1.5.	**Immersible stem length: at least 200mm;**
4.1.6.	**Minimum immersion length at least 100mm;**
4.1.7.	**4-wire;**
4.1.8.	**SST or Inconel sheathed;**
4.1.9.	**Spade lugs terminations;**
4.1.10.	**Nominal resistance @ 0˚C (ICE-point) or @ 0.01˚C (TPW) = 100Ω;**
4.1.11.	**Temperature coefficient = 0.0039250 Ω/Ω/˚C;**
4.1.12.	**Supplied with a calibration certificate:**
4.1.12.A.	*issued by an ISO 17025 laboratory, accredited by a body signatory to the ILAC MRA,*
4.1.12.B.	*reporting on a calibration executed by comparison to an ITS-90 traceable SPRT,*
4.1.12.C.	*covering at least 8 calibration points:*
4.1.12.C.i.	0.01˚C (TPW),
4.1.12.C.ii.	Min or close to Min range temperature,
4.1.12.C.iii.	Max or close to Max range temperature,
4.1.12.C.iv.	ITS-90 TP-Hg (-38.834˚C),
4.1.12.C.v.	ITS-90 FP-In (156.599˚C),
4.1.12.C.vi.	ITS-90 FP-Sn (231.928˚C)
4.1.12.C.vii.	ITS-90 FP-Zn (419.527˚C),
4.1.12.C.viii.	A point between Min range temperature and ITS-90 TP-Hg (-38.834˚C);
4.1.12.D.	*with calibration (expanded) uncertainties:*
4.1.12.D.i.	≤ 0.010˚C, up to and including 0.01˚C (TPW),

4.1.12.D.ii.	≤ 0.020°C to FP-Sn (231.928°C),
4.1.12.D.iii.	≤ 0.025°C to the Max;
4.1.13.	**Covered by a full two-year warranty, including parts and labour.**
4.1.14.	**Potential tenderers are not allowed to offer this specification text as the sole descriptor of their proposal. An "as-requested" and an "as-offered" reply must be made, accompanied by product specifications and product numbers, diagrams or pictures of the proposed solutions, together with the unit price for each item;**

5. LOT 5

5.1. Full-immersion Platinum Resistance Thermometer

Qty: 10
Technical Specifications

SPECIFICATION	
5.1.1.	**Able to operate "fully immersed" (i.e., sensor, transition junction and lead wires) in:**
5.1.1.A.	*calibration comparison baths (liquid environment),*
5.1.1.B.	*calibration chambers (dry environment);*
5.1.2.	**Temperature range at least [-70˚C to 150˚C];**
5.1.3.	**Furnished with a seal to prevent ingress of moisture into the sensor;**
5.1.4.	**Stem length (L): 50mm ≤ L ≤ 60mm;**
5.1.5.	**Stem ∅ = 1/8" or 3mm;**
5.1.6.	**4-wire;**
5.1.7.	**SST or Inconel sheathed;**
5.1.8.	**Bare-wire terminations;**
5.1.9.	**Nominal Resistance @ 0˚C (ICE -point) or @ 0.01˚C (TPW) = 100Ω;**
5.1.10.	**Temperature coefficient = 0.00385 Ω/ Ω/˚C;**
5.1.11.	**Accuracy compliant with IEC 60751, class A or better;**
5.1.12.	**Supplied with no calibration certificate but inclusive of R0-Value;**
5.1.13.	**Self-heating ≤ 0.003˚C in ice-bath;**
5.1.14.	**Drift rate ≤ 0.04˚C/100hr at max range temperature;**
5.1.15.	**Covered by a full two-year warranty, including parts and labour.**
5.1.16.	**Potential tenderers are not allowed to offer this specification text as the sole descriptor of their proposal. An "as-requested" and an "as-offered" reply must be made, accompanied by product specifications and product numbers, diagrams or pictures of the proposed solutions, together with the unit price for each item;**

6. LOT 6

6.1. Electronic Non-Automatic Weighing Instrument

Qty: 1
Technical Specifications

	SPECIFICATION
6.1.1.	**Rugged and portable, suitable for applications outside the lab in challenging industrial conditions;**
6.1.2.	**Platform-type, with stainless-steel platform and digital indicator;**
6.1.3.	**Platform dimensions ≥ 30cm x 30cm and ≤ 50cm x 50cm**
6.1.4.	**Powered by mains (230 V (±10%), 50/60 Hz) and optionally also by battery; All solutions will be considered, although all the other requisites being the same -, preference will be given to those featuring both powering modes**
6.1.5.	**Fitted with power connections suitable for use in Malta;**
6.1.6.	**Battery:**
6.1.6.A.	*Rechargeable,*
6.1.6.B.	*Rechargeable time ≤ 12h,*
6.1.6.C.	*Operating time ≥ 8h;*
6.1.7.	**Fitted with:**
6.1.7.A.	*Level indicator,*
6.1.7.B.	*Adjustable levelling feet;*
6.1.8.	**Ingress protection for both platform and indicator at least IP65;**
6.1.9.	**Operating environmental conditions:**
6.1.9.A.	*Temperature at least [10˚C to 40˚C],*
6.1.9.B.	*Humidity at least [0%RH to 80%RH];*
6.1.10.	**Metrological performance specifications:**
6.1.10.A.	*Capacity ≥ 60 kg*
6.1.10.B.	*Resolution d ≤ 10g over the full range of the instrument (≥ 6,000 div);*
6.1.11.	**Fitted with a PC interface;**
6.1.12.	**Covered by an EU-type examination certificate, accompanied by a Declaration of Conformity to and furnished with all the markings required by the European Directive 2014/31/EU;**
6.1.13.	**Supplied with:**
6.1.13.A.	*Verification report attesting compliance with the applicable maximum permissible errors (Accuracy class III or better – European Directive 2014/31/EU);*
6.1.13.B.	*Transport case;*

6.1.14.	**The procedure to remove possible initially, factory-applied calibration/adjustment seal(s) to be provided;**
6.1.15.	**Covered by a full two-year warranty, including parts and labour.**
6.1.16.	**Potential tenderers are not allowed to offer this specification text as the sole descriptor of their proposal. An "as-requested" and an "as-offered" reply must be made, accompanied by product specifications and product numbers, diagrams or pictures of the proposed solutions, together with the unit price for each item;**

SECTION 4 – SUPPLEMENTARY DOCUMENTATION

4.1 – Draft Contract Form

4.2 – Glossary

4.3 – Specimen Performance Guarantee

These are available to view and download from the 'Resources Section' at: www.etenders.gov.mt

4.4 – General Conditions of Contract

The full set of General Conditions for Supplies Contracts (Version 4) can be viewed/downloaded from the 'Resources Section' at: www.etenders.gov.mt

It is hereby construed that the tenderers have availed themselves of these general conditions, and have read and accepted in full and without reservation the conditions outlined therein, and are therefore waiving any standard terms and conditions which they may have.

These general conditions will form an integral part of the contract that will be signed with the successful tenderer/s.

4.8 – General Rules Governing Tendering

The contents of this procurement document complement the latest version of the General Rules Governing Tenders applicable on the date of the publication of this tender, the Terms of Use and the Manual for Economic Operators applicable to Government's e-Procurement Platform (available from the Resources section of www.etenders.gov.mt).