Schola Europaea
European School of Mol

II. TENDER
TECHNICAL SPECIFICATIONS

NEGOTIATE PROCEDURE OF MIDDLE VALUE

TENDER N° 2025_08

MAINTENANCES AND REPAIRS of HVAC (heating and air conditioning) and VENTILATIONS SYSTEMS.

Award method: **best value for money.**

Type of contract: **Framework contract.**

Contracting authority: **European school of Mol.**

Estimated Value: **140.000,00€**

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The purpose of this tendering contract is to provide preventive, corrective and statutory maintenance services for all heating, air conditioning and ventilation systems installed in the European School in Belgium.

The Contractor shall ensure that all equipment remains safe, operational, energy-efficient and compliant with applicable technical and legal requirements.

1. WORKS TO BE DEVELOPED

1.1. General Maintenance HVAC

A fixed annual price will be included for the following works:

- Heat generation: boilers, heat exchangers, heat pumps, heating units, burners, domestic hot water circuits if they exist, expansion vessels, safety valves, traps and distribution elements.
- Cold generation: chillers, chilled water groups, condensers, compressors, refrigerant pumps, cooling towers if they exist, expansion valves, desiccators and refrigeration circuits.
- Distribution: water pumps, pipes, valves, traps, actuators, thermostats, probes, registers, and balancing elements.
- Ventilation and air conditioning: air units, exhaust fans, fans, heat recovery systems, filters, batteries, humidifiers, dehumidifiers, dampers, grilles, diffusers, and ducts.
- Control and regulation: systems, control panels, automations, time programmers, sensors, pressure switches, alarms and drives.
- Auxiliary elements: electrical panels for the supply of thermal equipment, protections, specific PPE, signage, and safety and protection elements against frost, overheating and leaks.

1.2. Maintenance and cleaning of ventilation systems

The tasks will primarily focus on the maintenance and cleaning of the school canteen's ventilation systems. Additionally, other tasks related to ventilation systems may also be carried out, such as:

- Ventilation units,
- heat recovery units,
- dampers,
- filters,
- fans,
- CO2 probes,
- pressure switches and
- calibration and regulation elements

that shall be maintained to ensure flow rates, air renewal, filtration, and hygienic control appropriate to school use.

The successful bidder will periodically check the condition of filters, batteries, condensate trays, drains, recuperators, and control elements, recording any incidents that may affect indoor air quality or thermal comfort.

Any anomaly that compromises the ventilation of classrooms, dining rooms, laboratories, or spaces of prolonged occupation will be treated as a priority incident.

1.3. Installation of additional components or equipment.

At the school's request, the installation of additional elements or components may be requested, such as new air conditioning units, air renewal fans, or dehumidifiers, etc.

In this case, a separate quote will be requested during the contract's execution. The contractor must provide a copy of the purchase invoice for the materials from their supplier, to which they may add an additional processing fee of up to 10%, and include the number of labour hours at the standard rate applied in their bid.

2. TYPOLOGIES OF MAINTENANCE

2.1. Annual preventive maintenance.

The contractor shall operate annually through actions aimed at carrying out maintenance of the indicated systems, in such a way as to evaluate and reduce the probability of failure or loss of functionality of any of its elements.

This will include the set of simple maintenance activities that are carried out regularly or repeatedly on each element (cleaning filters or pipes, tightening connections, calibration, checking levels, replacing fuses or small parts, etc.).

Preventive maintenance includes:

a. Default maintenance: Preventive interventions carried out at predetermined time intervals or based on a predefined number of operating units (usually hours). The recommendations of manufacturers and the specific and legal regulations of the technical installations that shall be complied with shall be taken into account.

b. Technical-legal maintenance: on installations in accordance with the specifications required by Community, national or regional industrial standards.

c. Conductive maintenance: preventive maintenance carried out continuously or occasionally, monitoring or inspecting the operation of an element based on certain physical parameters, and/or tests, and/or analysis and defining the necessary corrective actions based on them.

Annual preventive maintenance services will be invoiced and paid at the price set in the contract, in accordance with the contractor's financial proposal.

2.2. Corrective maintenance.

In the event of a breakdown, failure or malfunction of an installation, equipment or element that causes a degradation of service or performance, the contractor shall

respond by means of corrective actions or repairs necessary for it to carry out its function.

Corrective maintenance shall be carried out at the request of the technical staff of the European School or on the recommendation of the contractor (subject to the acceptance of the contracting authority). And they will be paid based on the prices offered in the economic offer for labor and the price of the materials used.

Corrective maintenance will include:

- The hours of work in detecting the causes of the interruption or failure of the equipment and for the repair of damaged installations and their commissioning,
- Use of appropriate technical equipment and tools
- the transitional measures necessary to alleviate the disadvantages of a damaged installation,
- the establishment of a diagnosis on major and/or frequent faults, the management of supply and purchase of materials and equipment,
- Work required by external specialists, such as electricians, masonry, etc.
- the supply and placement of spare parts under the established conditions.
- Support from specific external service providers (services that technically require a specialist that the contractor does not have), for example for the installation and programming of applications and/or technological programs.

When an anomaly detected is the responsibility of the Contractor, the Contractor will bear all the costs necessary for its adaptation and fine-tuning.

The adaptation and fine-tuning of the installations after the anomalies detected by an audit, provided that such anomalies are attributable to the Contractor, will be the responsibility of the Contractor himself.

2.3. Response times

The Contractor shall respond to incidents according to their severity:

- Critical incidents: within 24 hours.
- Major incidents: within 48 hours.
- Minor incidents: within 5 Laboral days.

In the technical report to be assessed during the bidding process, the contractor must describe what types of work will be considered in terms of its level of criticality.

3. REPLACEMENT OF COMPONENTS AND PARTS

The Contractor shall provide all equipment, materials, and work tools necessary for the proper operation and maintenance of the facilities.

The necessary equipment, materials and spare parts will be borne by the Contractor provided that:

- on the one hand, the unit value (i.e. the price of 1 individual piece that is not part of a set, regardless of its transport and packaging) of these materials does not exceed 200€ excluding VAT, and that,
- on the other hand, they are assigned only to maintenance operations or troubleshooting operations.

For the installation of parts or equipment, the value considered shall be the same as that of the supplier's invoice, net price (including the supplier's discount on tariff), excluding VAT, excluding shipping costs and excluding the overhead coefficient and, to which the contractor may charge an additional cost as an industrial profit offered, by management.

The contractor shall offer a cost proposal, which shall be authorised by the European School, before its intervention.

The fact that certain parts or components are difficult to maintain, or that the replacement and/or repair of specific equipment involves special work shall not be grounds for additional compensation and the reduction of the Contractor's obligations shall not be allowed.

The following items are excluded from this contractual obligation:

1) Damage to components by third parties.
2) Modifications derived from a change in legislation.

4. INITIAL TECHNICAL INVENTORY AND DIAGNOSIS

Those bidders who wish to attend the **technical visit** (during the tendering period) to prepare their bid will be able to observe the status of the current facilities and will be given a photographic report, so that they can take their notes.

Within a **maximum period of twenty-five (25) calendar days** from the formalisation of the contract, the successful bidder shall submit an initial technical report that includes:

- Complete inventory of all equipment and systems, with make, model, serial number, wattage, age, location, state of conservation and level of criticality.
- Classification of equipment according to criticality: teaching continuity equipment, safety equipment, comfort equipment and auxiliary equipment.
- Identification of critical spare parts and those equipment with the highest risk of failure.
- Diagnosis of risks, recurring incidents, and recommendations for immediate improvement.

This initial technical inventory will be reviewed and approved by the school's management and will serve as the basis for the execution of maintenance throughout the contract.

5. PROGRAMMING OF ANNUAL INTERVENTIONS.

The contracted service shall be especially oriented to the continuity of the operation of the teaching activity and its general services.

This means that the contractor shall provide short response times, intervention outside school hours when possible and a prioritization protocol for classrooms, libraries, laboratories, dining rooms, and administration spaces.

The calendars of the annual interventions will be agreed by the contractor and the European School, and may be adapted each year, in accordance with the calendars of activity of the European School.

5.1. Proposed annual calendar

April (or during the Easter holiday period)

- Seasonal transition review.
- Progressive reduction of heating.
- Preparation of the refrigeration campaign. Dampers, probes, thermostats, cold coils, drains, condensate pumps, filters, and automatic start/stop sequences should be checked. It will be a good moment to spot equipment with yield drift before the peak load season.

May (last week)

- General start-up of the summer air conditioning.
- Checking condensers, compressors, pressures, refrigerant levels, tightness, alarms, condensate trays, air flow rates and supply temperature.
- Cleaning or replacing filters.
- Verification of control systems by zones, especially in spaces with high occupancy such as classrooms, assembly halls and dining rooms.

July

- Major technical stop
- Cleaning of pipes,
- Replacement of wear parts,
- Checking electrical panels,
- Leak tests, hydraulic balancing, calibration of probes, revision of variators, updating of automations and corrective actions of longer duration.

During this period, interventions that require service cuts, dismantling or access to unique areas should be concentrated.

August (last week). General operation check campaign.

- Check schedulers, setpoints, start orders, filters, alarms, batteries, extractors, fans and all systems that ensure comfort from the first day of school.

- Issuance of a conformity report at the start of the course, with a declaration of operational teams and a list of pending actions.

October

- Start-up of the heating season, with test of sequences, pumps, valves, generators, regulation, and thermostats. Heating check, control of control panels, monitoring of alerts and review of supply and return temperatures, pumps, valves, expansion vessels, and frost protections.
- Verification of the response of the installation to low temperatures, as well as the behaviour of the ventilation in periods of greater occupancy.
- Visual inspections of leaks, abnormal noise, vibrations, and operation of the time regulation.

December

Year-end document review with balance of breakdowns, consumption, corrective actions, and budget forecast for the following year

Access to buildings.

The contractor or his staff requiring access to buildings to carry out work must first receive authorization from the person in charge of building management, or from any other delegate duly authorized by the School.

In practice, this authorization will be transmitted at the same time as the order form is sent, but depending on the work to be carried out, the possibility of accessing the buildings will depend on the inconvenience that will be caused to the smooth running of school life. The service providers must in all cases announce themselves at least 24 hours (1 day) in advance and provide the data of the participants for identification. He/she will always remain fully responsible for the use that will be made of any means of access to the building entrusted to him (visitors' badge) and will ensure that only a limited number of employees within his company can use it.

6. LOGBOOKS:

After each of the scheduled actions, the contractor will issue a report that will be considered as a certificate of receipt of the works, stating the dates of the work.

These reports may be used for possible technical audits.

7. GUARANTEES:

7.1. Guarantee of the works:

Each one of the contractor's actions within the framework of corrective maintenance and the like, will have a guarantee of **at least 1 year**.

During that time, the Contractor will be responsible for its repair, without financial compensation and without limit, unless it is proven that the problem is beyond the Contractor's control.

During this time, the Contractor will be responsible for the necessary arrangements for the repair or replacement of the equipment, without financial compensation and without limit, unless it is proven that the problem is beyond the control of the Contractor.

The Contractor will be responsible for the management, monitoring and coordination of the guarantee of the works, works and equipment, carried out by other Contractors and transferred to the Maintenance Contract, according to the corresponding protocol.

7.2. Equipment warranty:

Each one of the equipment supplied or installed within the framework of this contract will have a warranty of **at least 2 years (European minimum).**

For electronic equipment with digital components, manufacturers shall ensure spare parts for a minimum of 10 years, and the warranty can be extended if there is a continuous supply of digital content.

8. PERSONNEL AND PROFESSIONAL QUALIFICATIONS:

The tenderer shall propose in its bid an organizational chart to achieve the objectives of the contract, which shall reflect the composition of the team assigned to it, indicating its function, category, and number of personnel by categories assigned to the framework contract.

The proposed organizational chart and the minimum number of staff offered will be contractual. During the performance of the contract, no modification of the contract may be made without having informed European Schol of this and obtained its prior written consent.

The services of the requested profiles corresponding to the annual fixed price offered shall be carried out by different people and with full dedication (100%).

All personnel involved in thermal, refrigeration, electrical or control equipment shall have the professional qualifications and qualifications required according to the specific task, and shall prove sufficient training in safety, refrigeration, electricity, working at height and handling of hazardous substances where appropriate.

The successful bidder will ensure that critical interventions are carried out by technicians with demonstrable experience in equivalent facilities of intensive use and school occupancy.

The contracting authority of the European School Mol may require the replacement of staff who do not demonstrate sufficient technical competence or do not comply with the access and safety standards of the school.

9. SUBCONTRACTING

The subcontracting of certain tasks will be permitted, subject to the conditions described in the administrative specifications. However, the use of subcontracting is limited to a maximum of 15% of the total contract work.

For reference, during the last 4 years, the approximate budget spent has been as follows:

1. General Maintenance HVAC: 70%
2. Maintenance and cleaning of ventilation systems: 15%
3. Installation of Small Additional Components: 15%

Although these consumptions do not represent the committed estimates for the next 4 years of the contract.

In such cases, the main contractor must inform the contracting authority of the European School of MOL in advance of which tasks will be subcontracted, and the contracting authority must approve the subcontracting.

10. SAFETY AND RISK PREVENTION

The contractor shall implement the most appropriate protection measures against dust, noise, temporary cuts, and access to areas occupied by the educational community. It will also be obliged to provide tools, measuring equipment and approved PPE.

10.1. Facility Security

Maintenance shall include the review of safety elements, thermal protections, pressure switches, safety valves, limiters, alarms, interlocks, electrical protections, signalling and stop devices.

The successful bidder will be responsible for detecting and immediately reporting any risk of serious breakdown, leakage, overheating, freezing, anomalous condensation or regulation failure that may affect people, property or continuity of service. You may not resume commissioning of a system with safety defects without prior correction and functional verification.

11. WASTE MANAGEMENT AND ENVIRONMENTAL CONDITIONS:

The management of waste removed equipment, packaging, etc. will be on the contractor's own account, who will respond to the 4Rs of European legislation in order of priority: Reduce, Reuse, Recycle and Revalorise. Therefore, the contractor will be responsible for the elimination and correct disposal of the packaging.

11.1. F-gases and refrigerants

Any handling of refrigeration circuits, refrigerant recovery, charging, recharging, leak detection, emptying or dismantling shall be carried out by duly qualified personnel and with appropriate means for the traceability of the refrigerant gas.

The successful bidder shall apply the obligations arising from the European regulations on fluorinated gases, including leak control, recovery and registration of quantities added or withdrawn, as well as the progressive restrictions on the marketing and use of certain refrigerants in accordance with current regulatory evolution.

Any action that involves the deliberate emission of refrigerants into the atmosphere will be prohibited.

12. APPLICABLE TECHNICAL REGULATIONS.

12.1. General regulatory compliance

The successful bidder will perform all the services subject to the contract in accordance with the applicable European, Belgian and local regulations on thermal installations, air conditioning, ventilation, energy efficiency, industrial safety, occupational risk prevention, fire protection, the environment and refrigerant management.

Regulatory compliance will be understood to be required for both preventive and corrective maintenance, replacements, adjustment adjustments, functional tests and seasonal start-ups.

When applicable by technical analogy or by express reference in the specifications, the successful bidder shall follow the following technical principles:

- **Energy efficiency**: Equipment shall operate optimally to reduce energy consumption and minimize polluting emissions. Preventive maintenance shall avoid energy waste by checking the performance of the generators, the condition of the thermal insulation and the regulation and control of the temperature.
- **Safety**: Maintenance operations will seek to prevent breakdowns, refrigerant leaks and ensure correct combustion in the case of boilers, protecting both users and the building's infrastructure.
- **Well-being and hygiene**: The installation shall maintain an adequate temperature and humidity but guarantee adequate indoor air quality. Therefore, this will mean that during periodic checks, filters, ducts, and batteries shall be cleaned to prevent the accumulation of bacteria, dust, and harmful particles.

12.2. Regulation of thermal installations

Heating, cooling and ventilation installations shall be maintained in such a way as to maintain the design performance, safety of use and expected energy performance.

The successful bidder of the contract shall comply with the requirements of maintenance, recording of operations, efficiency control and periodic reviews provided for in the technical regulations applicable to thermal installations and in the reference standards of the manufacturers.

Any intervention that alters conditions of power, flow, coolant, control or distribution shall be documented as a reform, modification, or improvement, as appropriate, and processed with the prior authorisation of the European School.

13. PENALTIES

Penalties are established for partial or defective performance of the contract.

Any breach committed by the contractor will be classified, according to its significance, proportionality, and intent, as minor, serious, or very serious, in accordance with the following criteria:

13.1. Classified as minor:

- Those that, while adversely affecting the operation and efficiency of the contract, are not due to malicious intent, do not pose a danger to persons or property, do not reduce the economic life of the work performed, and do not cause inconvenience to employees and users of the administrative offices.
- Failure to provide proof of compliance with obligations regarding labour, social security, and occupational risk prevention when required.

13.2. Classified as serious:

- Those that, as a consequence of the contractor's liability, generate serious deficiencies in the contracted service or cause danger to employees or users of the administrative facilities.
- Failure to comply with the timeframes and deadlines for resolving breakdowns, as stipulated in the Technical Specifications.
- Unacceptable irregularities in the provision of services, in accordance with the conditions established in the Specifications.
- Obstruction of control and inspection tasks by the Administration or its authorized agents.
- The accumulation of two minor breaches within a six-month period.

13.3. Classified as very serious:

- The accumulation of three serious breaches within a one-year period. Violation of mandatory labour regulations.