

TERMS OF REFERENCE

Name of the service:	Technical maintenance services of automatic regulating system of temperature, heat consumption accounting system, heating system, cold and hot water supply systems, sewerage systems and blow-through unit heaters II-1, II-2, II-3.
Project name and number:	00074921 Building maintenance.
Contract type:	Contract for the provision of services in the UNDP format.
Place of work:	14, A. Mambetov str., Nur-Sultan, Kazakhstan
Period:	3 years (36 months) from the date of signing of the Contract. UNDP will sign a Long Term Agreement initially for the period of 1 Year which may be extended for additional 2 years, based on satisfactory performance of service provider. There will be no price revision throughout the duration of LTA.

1. General information:

2021 the UN building in Nur-Sultan are subject to maintenance works according to the budget of the project "Building Maintenance".

The budget for these works is laid down and available.

The result of the work will be the maintenance of the building's thermal systems.

The goal is to attract a contractor company and perform maintenance work:

- system on automatic regulating of temperature;
- heat consumption accounting system;
- heating system, cold and hot water supply systems, sewerage systems and blow-through unit heaters II-1, II-2, II-3.

2. Main tasks:

- Technical services of system of automatic regulation of temperature;
- Technical services of heat consumption accounting system;
- Technical services of the heating system, cold and hot water supply systems, sewerage systems;
- Plumbing works (water supply, sewerage);
- Technical services of blow-through unit heaters II-1, II-2, II-3.

3. Service requirements

3.1 Technical services of system of automatic regulation of temperature (SART):

- regular SART examination (at least twice a month);
- checking the condition and operability of both the individual element (sensors, converters, actuators, valves, pumps, controllers, pulse and cable lines) and as part of the system;
- check the condition of low-current contact connections, clean them and restore them if necessary;
- remote monitoring, verifying software operation and management control controllers regulating Danfoss, using SCADA software system "ASKERDE ZAO ESKO 3E" in the on-line mode (not less than once in five days);
- remote dispatching control of the parameters of the operation of heat-consuming circuits for the needs of heating, ventilation and hot water (at least once a week);
- checking the operability of the ASRT elements;
- checking the correct execution of the specified heat consumption mode;
- elimination of identified malfunctions (which do not require expensive repairs and / or replacement of SART components);

- visit to the site for troubleshooting and / or changing the heat supply modes on a call from UNDP;
- analysis of thermal parameters of heat systems, with the aim of tuning control systems at the most economical and comfortable mode of heat;
- control, verification and adjustment (if necessary) of the program settings of the control controllers both remotely and on site in order to ensure the correct management of heat consumption modes;
- troubleshooting problems that do not require expensive repairs and / or replacement;
- remote monitoring and management of the operation and archives of the VKT-7-04 heat meter and the ASRT system based on Danfoss control equipment, using the SCADA software of the ASKURDE system of ESCO 3E CJSC, implemented at the Facility in on-line mode (at least once every five days);
- ensure the operability of the communication channel systems served by the C & C server and a database storing data in JSC "Astana-Teplotransit»;
- ensuring the transfer of archived data on heat energy consumption to the server of JSC "Astana-Teplotransit" and the sales department with access to the current instantaneous readings of the heat meter by the "Teplosbor" system;

3.2 Technical services of heat consumption accounting system (CAS):

- regular (at least twice a month) inspection of the heat metering system;
- remote dispatching control of temperature and flow parameters of the coolant (at least once a week);
- elimination of identified malfunctions (which do not require expensive repairs and / or replacement of STU components);
- view and analyze heat consumption parameters;
- ensuring the operability of the communication channel of the serviced system with the management server and the data storage database in Astana-Teplotransit JSC, restoring (if necessary) its operability;
- ensuring the transfer of archived data on heat energy consumption to the server of JSC "Astana-Teplotransit" and the sales department with access to the current instantaneous readings of the heat meter by the "Teplosbor" system;
- visit to the site for troubleshooting on a call from UNDP;
- dismantling of STU elements subject to metrological verification with the installation of simulators or plugs in their regular place;
- installation of devices (in case of their replacement or verification) in the heat metering unit;
- submission of the STU for commercial registration to the responsible representative of the "Energy Supply organization" before the start of the heating season.

3.3 Technical services of the heating system, cold and hot water supply systems, sewerage systems:

Maintenance of the heat input unit:

- visual monitoring of the condition and operability of the equipment and pipelines of the heating system with monitoring of the condition of the threaded connections (at least twice a month);
- monitoring of the temperature and hydraulic parameters of the heat consumption circuits for their compliance with the specified modes (at least once a week);
- adjustment (adjustment) of the temperature modes of operation of the heat-consuming circuits of the system (if necessary);
- control and adjustment (if necessary) of the system of recharge and compensation of temperature extensions of the heat consumption circuits;
- seasonal (spring-autumn) adjustment of program settings of control controllers;

- maintenance of the step-up pumping station of water supply with control of sufficiency of its pressure characteristic (at least once a month);
- maintenance of the fire extinguishing pumping station with monitoring of its operability;
- replacement (if necessary) of the sealing gaskets of the flanged connections;
- elimination of malfunctions and defects that do not require replacement of system elements;
- Unscheduled site visit for troubleshooting at the request of UNDP;
- participation in the development of measures to improve energy efficiency and reliability of the heat consumption system;
- start-up and shutdown of the heating system (autumn, spring, emergency, regime);
- preservation of the heating system (end of the heating period), monitoring the state of the system during the preservation period 1 time per decade;
- elimination of minor malfunctions in the heating system (fixing straggling sections of thermal insulation, the cover layer, eliminating leaks, including in threaded connections without replacing them, installing bandages on pipes);
- clean the mesh filters, shut-off and control valves from the scum and mineral deposits.

3.4 Plumbing works (water supply, sewerage):

- cleaning of sewer risers, including discharge to the sewer collector (if necessary);
- replacement of valves, gaskets, counterpipes, bends, threads, floats, valves, flexible liners, taps when they are found to be worn out (without the cost of materials and products);
- adjustment of the flush tanks in the san.nodes;
- elimination of leaks and wetness on threaded connections;
- elimination of subsidence of sewer pipelines and outlets;
- production of preventive maintenance of sewer risers and filling;
- formation of an exchange fund of materials for the elimination of emergency situations.

3.5 Technical services of blow-through unit heaters II-1, II-2, II-3:

- monitoring the performance of equipment and elements of automatic control of heat consumption;
- diagnostics of the electronic equipment of the control panel for the presence of electromechanical problems;
- adjustment (if necessary) of the program settings of the control controllers in order to correctly maintain the temperature and flow (through the supply air) modes of operation of the supply units;
- inspection to determine the accuracy of the instrumentation and control system measurement;
- checking the pumping equipment for mechanical problems;
- monitoring of the operability of the electric motors of the fans of the supply units and their drives;
- monitoring the operability of louver grilles and their actuators;
- monitoring of the efficiency of the speed converters of the electric motors of the fans of the supply units;
- monitoring the condition of the air filters for clogging with dust deposits, cleaning them (if necessary) or replacing them (without the cost of filters);
- elimination of identified malfunctions (which do not require expensive repairs and / or replacement of component materials, parts and equipment).

4. Results and deadlines:

The results of the work done should be submitted to UNDP within the established time frame in accordance with the content of the work.

№	Expected results	Time of performance	Accountability and coordination of work
1	Technical services of SART	Monthly	CP Manager
2	Technical services of CAS	Monthly	CP Manager
3	Technical services of the heating system, cold and hot water supply systems, sewerage systems	Monthly	CP Manager
4	Plumbing works (water supply, sewerage)	Monthly	CP Manager
5	Technical services of blow-through unit heaters II-1, II-2, II-3	Monthly	CP Manager
6	Providing an analysis of thermal energy consumption in the form of a daily graph or chart.	Monthly	CP Manager

In addition, if necessary, according to the call, including calls at night.

	Type of works	Frequency
1	Adjustment of equipment and systems, temperature parameters in accordance with technical specifications.	If necessary
2	Identifying the causes of equipment failures and ways to quickly fix them	If necessary
3	Preparation of defective statements for repairs	If necessary

5. Payment terms:

Payment is made monthly based on the act of performance of services within 30 (thirty) days from the date of receipt of the act in the UNDP.

6. Place of work: UN Building, 14 A. Mambetova str., Nur-Sultan.

7. Responsibility and accountability

- The contractor is fully responsible for the timely provision of services, performance of works and reports;
- The Contractor does not have the right to distribute, transmit materials collected and prepared within the framework of this technical task without the permission of UNDP;
- The contractor undertakes to comply with the legislation of the Republic of Kazakhstan;
- In the course of its work, the Contractor is accountable to the UNDP building Manager;
- The work must be performed efficiently and in a timely manner, in accordance with the requirements of the contract and this technical specification. In case of poor quality of the Contractor's work, UNDP reserves the right to terminate the contract unilaterally;
- The contractor ensures the unconditional fulfillment of the requirements stipulated in the contract and the terms of reference;
- The Contractor guarantees that the equipment and materials to be used in the performance of this agreement comply with the terms of reference and the terms of this Agreement;
- The contractor must inform the Building Management Manager of all workplace injuries or accidents, if any.

IMPORTANT!!! In connection with the COVID 19 pandemic, the contractor undertakes to provide all necessary protective equipment for its employees and to comply with all WHO standards and recommendations for performing work during the epidemic. The Service Provider is responsible for ensuring that its employees involved in this Terms of Reference are properly and promptly provided with all necessary personal protective equipment in accordance with current WHO recommendations (masks, gloves, sanitizers, COVID-19 testing (if necessary), for the entire duration of the contract.

8. Qualification requirements:

The service provider may be a company / organization that is duly registered and meets the following requirements:

1. Have civil legal capacity to enter into contracts (certificate of registration / re-registration, constituent documents, VAT certificate, if the company is a VAT payer);
2. Be solvent, not subject to liquidation, its financial and economic activities should not be suspended in accordance with the legislation (certificate of absence of debt in the tax authorities);
3. Have experience in the development, implementation and operation of automated heat management systems at the facilities of Nur-Sultan and the Republic of Kazakhstan (at least five years);
4. Experience in the operation of internal engineering communications of buildings in the administrative and residential sector (at least five years);
5. Relevant engineering and technical personnel with higher specialized education (at least two specialists, work experience of at least five years);
6. Engineering and technical personnel with specialized education (IT-technologies), ensuring the operation of the dispatching control system (at least one specialist, with at least three years of experience);
7. Must have a License certificate for the right to use the software of ASKURDE " Research Institute of IT-ESCO" and technical personnel who have been trained and certified to work with the "ASKURDE" dispatch control system» ("ASKURDE" certificate);
8. Own (or rented) transport for transporting equipment for diagnostics, repair or maintenance (written confirmation);
9. The presence of an office in Nur-Sultan, to provide round-the-clock "hot lines" (contact phone number, email address) in the "24/7" mode for submitting applications;
10. Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.

These qualification requirements also apply to subcontractors, if they are involved in the performance of this task. It is possible to combine several qualifications by one specialist. There are no quantitative restrictions on the availability of specialists from a potential supplier.

The content of the Application should allow the Customer to assess the approach and degree of readiness of the potential Supplier to provide the Services that are the subject of this technical specification.

9. Recommendations for submitting a proposal:

- a. Financial and technical proposals according to Request for quotation #RFQ-2021-012;
- b. Certificate of registration / re-registration, constituent documents, VAT certificate, if the company is a VAT payer;
- c. Certificate of absence of debt in the tax authorities;
- d. Supporting documents for confirmation of 5 years experience in development, implementation and operation of automated heat management systems and in the operation of internal engineering communications of buildings in the administrative and residential sector as per above "Qualification requirements 3-4" (Contracts or act of acceptances and table/list of clients with contact details for similar services required by UNDP, description of contract objectives, duration,)
- e. Supporting documents for personnel as per criteria of points 5-7 of "Qualification requirements" (written confirmation about availability of personnel, quantity for each position, certificates, diplomas, work history book/employment certificate)
- f. Written confirmation of presence in Nur-Sultan with round-the-clock "hot lines" in the "24/7" mode for submitting applications, with information on address, contact phone number, email address
- g. Free-form Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.

h. Written confirmation of transport availability for transporting equipment for diagnostics, repair or maintenance.

Selection criteria:

Service providers will be evaluated based on the lowest bid method. The opportunity to provide services will be provided to the service provider whose offer has been evaluated and determined as:

- 1) Meets the requirements of the ToR;
- 2) Offering the lowest cost of service.

Terms of reference prepared:

Serzhan Abdi
CP Manager

Serzhan Abdi

Terms of reference approved:

Dana Amanova
Operations Manager

Dana Amanova