TECHNICAL SPECIFICATION (F4.1)

Tender number: ocds-b3wdp1-MD-1606830471722 dated December 01, 2020

Tender name: Maintenance, servicing and repair of radioactive substances detection systems

CPV code	Name of services	Full technical specificatio n required by the contracting authority	Full technical specification proposed by the tenderer	Reference standards
1	2	3	4	5
	Services			
50000 000-5	Maintenance, servicing and repair of radioactive detection systems	According to the information set out in point 2 of Chap. II	I. General conditions 1.1. Maintenance services / maintenance, repair and removal of defects for stationary systems, mobile and portable detectors of radioactive substances type TSA Rapiscan, under a 24x7 inclusion in the cost of consumables necessary for the proper functioning of equipment. Note: Spare parts for TSA-Rapiscan systems are provided to the Customs Service of the Republic of Moldova free of charge by the NSDD Program (former Second Line of Defense Technical Assistance Program). These, at the request of the Service Provider, are to be sent to the customs post to replace the defective parts. 1.2. their logistical services regarding the adjustment / adjustment, replacement and / or purchase of parts (through the NSDD Program) or technical services for related equipment or subsystems; 1.3. services their consultation and / or training customs staff on the correct use Rapiscan Systems TSA. 2. Equipment maintenance: 2.1. Stationary gamma and neutron portal detector for pedestrian control TSA-Rapiscan PM700;	Not applicable

- 2.2. Stationary gamma and neutron radiation gate detector for road transport control TSA-Rapiscan VM250;
- 2.3. Stationary gamma and neutron radiation portal detector for railway (and road transport control in non-standard spaces) TSA-Rapiscan TM850;
- 2.4. Mobile gamma and neutron radiation detection systems TSA-Rapiscan MDS Van;
- 2.5. Portable dosing meters for gamma radiation detection TSA-Rapiscan PRM-470.
- 3. Place of operation locations and authorities across the customs located within the national borders of Moldova it is installed, used or maintained equipment / system radiological.
- 4. Response time to notification 24 hours / 7 days a week, including holidays, up to 8 hours from the time of the call or notification by the System Operator or the customs representative at the operating location.
- 5. Standard term for restoring system functionality:
- up to 72 hours from the receipt of the notification by the Service Provider (in case of the presence of the necessary spare parts at the warehouse of the Customs Service of the Republic of Moldova);
- up to 10 days for special modules / specific requests that require specific settings / calibrations single r i / adjustments complicated r i, since their grant by NSDD program.
- 6. The period of granting the services will start on 01.01.2021 and will be valid for a period of 1 (one) year until 31.12.2021.

II. Special requirements for the Service Provider:

1. Training and experience

- 1.1. The service provider has a minimum of 2 (two) employed engineers, who are trained, examined and certified by the NSDD Program (SLD) a fact confirmed by the certificates issued by the NSDD Program:
- for service / maintenance n ce / repair of stationary TSA Rapiscan;
- for service / maintenance n ce / repair mobile systems TSA Rapiscan;
- administration / servicing / maintenance n Your RAVEN special software.
- 1.2. The service provider has a minimum of two (2) engineers employees who have experience of using radioactive sources Cs-137, Co-57 and CF-252 granted by program NSDD Service ui Customs RM for setting / adjustment / Calibration Systems retention / Mobile TSA-Rapiscan according to the standards established by the NSDD Program:

- generation of false alarms,
- high / low background generation,
- occupancy test.
- 1.3. The service provider to obtain Radiological Authorization of "Use of dosimetric control devices of the parameters of ionizing radiation fields in monitoring activities"

2. Equipment needed

- 2.1. The service provider must have:
- instruments with electric shock protection;
- electronic testing equipment;
- equipment equipped with a specialized software for setting / adjusting / calibrating the portal monitors used by the NSDD Program;
- specialized electronic device for collecting the gamma spectrum;
- specialized devices for installing software for CAS / LAS;
- devices necessary for welding Multi-Mode optical connections .
- 2.2. The service provider must have means of transport for the movement of personnel, instruments and spare parts to the customs points equipped with TSA-Rapiscan Stationary / Mobile Systems.

3. Mandatory technological processes for corrective maintenance

In the event of a TSA-Rapiscan Stationary / Mobile System failure, the Service Provider must be able to:

- 3.1. To install, reinstall, configure the RAVEN Software according to the requirements established by the NSDD Program;
- 3.2. To process the setting of a new CAS / LAS;
- 3.3. To process the reconfiguration / restoration of the radiation detection system;
- 3.4. To process the replacement / configuration / adjustment of the high voltage plate for each gamma and neutron detector separately;
- 3.5. To perform voltage verification and adjustment according to the voltage map submitted by Oak Ridge National Laboratory or North Pacific National Laboratory after analysis of "daily files";
- 3.6. To process the change of the N-sigma value;
- 3.7. The repair process of / welding type optical connections Multi-Mode;
- 3.8. To process the replacement of elements and memory at the SC-770 and SCA-775 complex;
- 3.9. To process speed / occupancy / presence sensors adjustment .
- 3.10. To perform the repair and / or replacement of damaged parts / modules, with their subsequent configuration in the RAVEN Software.

- 3.11. To have authorized support from the North Pacific National Laboratory.
- 4. Mandatory technological processes for routine maintenance
- 4.1. Replacement and adjustment desiccant (1 lb. per pillar).
- 4.2. Inspection of portal monitor cabinets and distribution boxes for unauthorized penetrations, water leaks, rust marks, hinge lubrication.
- 4.3. Verification, troubleshooting and repair of components in the integrated-autonomous mobile MDS VAN system.
- 4.4. Real-time MDS VAN mobile complex testing with specialized software.
- 4.5. Periodic inspection of portal monitors of Auto, Passenger, Train type, with the performance of their electrical / electronic testing procedures according to the requirements of the NSDD Program.
- 4.6. Verification / testing, troubleshooting and repair of the complex battery charging system for portal monitors and distribution boxes.
- 4.7. Carrying out the Conformity Test and completing the necessary documentation.
- 4.8. Replacing (as appropriate) Gamma detectors and electronic alignment signed them.
- 4.9. Periodic inspection of the Pronautics charging system for MDS Van mobile systems.
- 4.10. Periodic firmware renewal at Rabbit board in SCA-775 complex.
- 4.11. Extracting the "daily files" with their analysis and sending them to the North Pacific National Laboratory.
- 4.12. Periodic maintenance of RPM-470 portable detectors: replacement of batteries, checking / cleaning of connections / contacts on internal electronic boards.
- 4.13. Restoration and maintenance of the NSDD National Communications System.

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