



Annex II

Terms of Reference (ToR)

Frontex Data Centre Maintenance

Tender Procedure No: Frontex/OP/87/2016/RS



1. General Information

1.1. Overview

The subject of this Maintenance Contract (hereinafter named "the Contract") is to provide administrative, proactive and reactive Services to Data Centre equipment and systems. The detailed scope of services are presented in chapter 2.

1.2. General Terms

All documents and other kind of data like drawings, specifications, plans, calculations, software and supporting records or materials acquired, compiled or prepared by the Contractor in the performance of the contract shall be the absolute property of Frontex. The Contractor shall, upon completion of the contract, deliver all such documents and data to Frontex. The Contractor mustn't retain copies of such documents and data and shall not use them for purposes other than related to the Contract without the prior written consent of Frontex. The Contractor shall not publish articles related to the services or refer to them when carrying out any services for others, or divulge information obtained from Frontex, without the prior written consent of Frontex. Any results or rights thereon, including copyright and other intellectual or industrial property rights, obtained in performance of the Contract, shall be the absolute property of Frontex, which may use, publish, assign or transfer them as it sees fit, without geographical or other limitation, except where intellectual or industrial property rights already exist.

1.3. Language

The Contractor shall assign staff with a good command of English language at least B2 level. All documents delivered under the Contract, either in paper or electronic form shall be in English. All the written communication regarding the contract shall be done in English.

1.4. Duration

The Contract should start on 1 September 2016 for one-year period with the possibility to be extended twice. The maximum duration of the Contract is three years. It may be extended only with the written agreement of the parties before such period elapses. To extend the Contract Frontex will send to the Contractor a letter of notification three months before the end of the Contract. The Contractor shall confirm his acceptance within a month from receiving the notification letter.

1.5. Place of Delivery

Administrative, proactive and reactive services shall be delivered at Frontex headquarters located in: Plac Europejski 6, 00-844 Warsaw, Poland. Remote services shall be delivered by phone or by remote assistance.

1.6. Coverage Time

All reactive services shall be available 24 hours per day, 7 days per week, including public holidays. All proactive services shall be provided within working days (Monday to Friday) and within working hours (from 8:00 to 18:00), unless due to the specific nature of works Frontex will require a different timeframe.

1.7. Glossary

DC - Frontex Data Centre area and related Facility Systems located on 8th floor of Warsaw Spire building "B".

DC area - Staging Area room, two Entrance rooms, two Server Rooms, Battery and UPS rooms, Fire suppression room, and two corridors from two DC exits.



DC Facility Systems - Data Centre supporting systems grouped as follows:

- Power
- Cooling
- Fire suppression and detection system
- Physical DC infrastructure (racks, cable trails, floor system etc.)
- DCIM monitoring system (including both software and hardware components)

DC Facility Systems includes both Frontex hardware and software components involved into Data Centre operations, even if they are not listed directly in this document. Frontex IT infrastructure (servers, disk arrays and network devices) are out of the scope of this document.

Service Request - An Incident or Problem escalated to Contractor's Single Point of Contact. The number of Service Requests shall be unlimited during the duration of the contract.

Incident - An unplanned interruption of a Data Centre Service or a reduction in the Quality of a Data Centre Service. For example, failure of a redundant component or failure of a configuration item that has not yet impacted Service availability.

Problem - A cause of one or more Incidents. The cause is not usually known at the time, and it requires further investigation.

Single Point of Contact (SPC) - Contractor telephone number and e-mail address, to be used by Frontex to start Service Requests and to address on-going support activities.

Response Time - period of time that begins when Frontex sends the Service Request via SPC and that ends when the Data Centre Technician responds to the request.

DCIM - Data Centre Inventory Management System, brand name StruxureWare.

1.8. Consumables

Within a month after the signature of the contract the Contractor shall present prices for all Frontex Data Centre Facility Systems degrading materials (e.g. batteries, air filters, etc.) calculated on the basis of the list presented in Appendix I to Annex II Terms of Reference. Frontex will be ordering the consumables from this list by issuing separate orders. Costs related to consumables will be covered by Frontex independently from the project's budget and shall not be included in the Financial proposal (Annex IV). The installation cost will be covered by the Contractor from the project's budget.

The price list shall be revised and updated every year based on the Contractor official price list. The revised list will be subject to Frontex acceptance.

Frontex reserves the right to order consumables via other providers if offers proposed by the Contractor will not be based on the most economically advantageous terms.

1.9. Spare parts

The Contractor shall provide and maintain parts and materials necessary to support and maintain the hardware products to keep it in operating condition according to requirements described in point 2.2.2 Reactive Services (Repair time), including parts and materials for the recommended engineering improvements.

Due to fact that Frontex Data Centre is still covered by warranty services, these parts and materials will be required to maintain after warranty periods will be over.



Current warranty services expires as follows:

Cooling systems: 29/04/2017

- Fire suppression systems: 29/04/2017

DCIM system: 29/04/2017

Rack Cabinets and related components: 29/04/2017

UPS's and electrical systems: 29/04/2017

- Power Generator: 01/09/2017

After described periods, if a need arises the Contractor shall be responsible for ordering required parts and materials to return operational state of Data Centre, within the timeframe regulated by Repair Time requirements described in point 2.2.2.5.

All replacement parts shall be new, original brand or substitute accepted by specific manufacturer specifications. Costs related to ordering parts will be paid by Frontex independently from the project's budget. The installation cost will be covered by the Contractor from the project's budget.

Frontex reserves the right to order parts/materials via other providers if offers proposed by the Contractor will not be based on the most economically advantageous terms.

2. Requirements

2.1. Administrative Services

2.1.1. Roles and Responsibilities

The relevant administrative and technical roles used in the performance of this contract are described below together with their responsibilities:

2.1.1.1. Frontex side

The Contract Manager (CM) is responsible for:

- Contract execution,
- Relationships with the Contractor.

The DC Specialist (DCS) is responsible for:

- Supervision and coordination of contract activities,
- Reporting Service Requests and incidents to the Contractor's Single Point of Contact (SPC) via assigned phone number or e-mail address,
- Verifying and accepting incident/support closures by signing report prepared by the Contractor.

2.1.1.2. Contractor side

The Account Manager (AM) is the Contractor's Single Point of Contact for the on-going support of the Frontex DC environment. The AM acts as a leader for his team and works with Frontex to develop, and routinely review, a mutually agreed Account Support Plan designed to meet Frontex objectives.

The Account Manager is responsible for:

- Preparation of the Account Support Plan,
- Technical advice and monitoring results of service requests, problems and incidents,
- Proposing and introducing industry best practices for Data Centre management and operations,
- Coordination and recommendation of proactive activities,
- Coordination of skills/resources (i.e. Data Centre Technicians),
- Review and reporting of support activities,



Escalation management.

The **Data Centre Technician** (DCT) delivers Maintenance and Support Services at Frontex premises, ensuring all the tasks assigned are completed accurately and delivered with high quality and in a timely manner,

Namely, the DCT performs:

- Installation, repair and maintenance of DC facility systems,
- Installation, modification and update of hardware, software and firmware,
- Testing using appropriate mechanisms and interpreting error messages,
- Modifications and/or improvements of products covered by the contract,
- Implementation of proactive services involving periodical inspection, tests and replacement of components,
- Assistance to test exercises organized by Frontex related to DC Facility Systems,
- Creation of detailed reports for every activity performed as it is described in the Technical Services chapter.

2.1.2. Account Support Plan

An initial Account Support Plan (ASP) shall be developed by the Contractor and proposed as part of the offer. A final ASP version will be agreed at the beginning of the Contract following AM meeting with Frontex CM and DCSs. The final ASP will be prepared for the period of 12 months. In case that the contract is extended ASP covering the extended contractual period will need to be prepared.

The initial ASP shall contain the proposed services and schedule of all the services to be delivered to Frontex according to the requirements described in this document. In the final plan the services and schedule shall be adapted and planned carefully in order to make them fully workable while not colliding with other tasks or routines in DC operations. The key objectives of the ASP include risk mitigation and a guarantee of continuity of DC operations. They shall be aligned with ICT goals to improve the operation of Frontex DC environment.

During the contract lifecycle, the ASP shall be updated twice a year to reflect any changes in Frontex ICT goals and DC environment. As part of this service, the Contractor shall update yearly the technical configuration information included in *Appendix I* as a supporting document to ASP.

2.1.3. Review Session

Twice a year the AM shall conduct a Review Session supported by an Activity Report addressing the following areas:

- Review and analysis of all recent support activities in the last 6 months' period,
- Recorded changes and configurations in DC area due to recent support activities,
- Assessment of trends and planned changes to the DC environment as a result of analysis of the last 6 months' period. The changes proposed by the Contractor will be assessed by Frontex and in case additional costs are needed they will be covered by Frontex. The maximum additional amount to be allocated for the changes/improvements to the existing DC environments shall not exceed 100,000 EUR during the whole duration of the contract, including potential extensions.

2.2. Technical Services

The Contractor will be responsible for the repairs and maintenance of DC Facility Systems according to the manufacturer recommendations and best practices. The contractor will be oblidged to follow 'Security Rules for Contracts Involving Frontex ICT Systems' presented in *Appendix IV to Annex II Terms of Reference*.



The list of Frontex DC components and schemes is available in *Appendix I to Annex II Terms of Reference*. The *Appendix I* will be made available to all economic operators after the signature of the Declaration of confidentiality presented in *Appendix II* to *Annex II Terms of Reference*. Economic operators willing to receive *Appendix I* shall send a scanned version of the Declaration of confidentiality dully signed by the authorised person(s) to: procurement@frontex.europa.eu.

2.2.1. Service Request Management Process

Any time during service availability Frontex starts a Service Request via SPC. The Contractor shall send within 1-hour Service Request Acknowledgement back to Frontex requestor via the designated SPC's email address. The Contractor shall confirm that the request was received, communicate the unique request number (ticket number) and indicate the expected resolution time.

Depending on the nature of the request the Contractor shall assess if it's possible to provide remote support or if on-site support is required.

In case of remote support, the Contractor shall start remote problem diagnosis and shall contact by phone Frontex DCS to provide the relevant information needed to solve the incident. This should be done within 4 hours from initiated Service Request.

In case on-site support is required, either due to the nature of the incident or because it was not possible to solve the incident remotely, the Contractor shall be on-site within 6 hours from the initiated Service Request.

Within 72 hours for non-redundant components or 14 days for redundant components the incident shall be resolved by the Contractor and verified by Frontex DCS; Frontex will send a message to the SPC e-mail stating the incident's closure. The SPC shall send in the same day an e-mail to Frontex with the timetable of problem diagnosis and actions carried out by the Contractor to solve the incident.

2.2.2. Reactive Services

In case of any Service Request the Contractor shall deploy remote or on-site support according to the parameters described in the following chapters.

2.2.2.1. Remote Support

During the remote support the Contractor DCT shall work with Frontex DCS to isolate the hardware or software problem and to remotely troubleshoot, remedy, and solve the problem. This shall be done during the coverage window defined in chapter Coverage Time. Prior to any on-site assistance, the DCT may initiate and perform remote diagnostics using electronic remote support tools (when available) to access products or other means to facilitate remote problem resolution. Whenever it is not possible to solve the incident remotely, the Contractor shall provide on-site assistance according to the requirements described in chapter On-Site Support.

2.2.2.2. On-Site Support

For issues that cannot be solved remotely, the Contractor shall send the DCT to provide on-site technical support for hardware or software products and to bring them back to their normal operating condition. In addition, the DCT may install engineering improvements (e.g. additional valve protection) to help Frontex to sustain proper functioning of the hardware and to maintain compatibility with producer's-supplied hardware replacement parts. The DCT must install any firmware updates that are required to return the product to its normal operating condition or to maintain supportability.

Any support activity should be analysed for potential impact on the Data Centre reliability and continuity of Data Centre operations.



2.2.2.3. Remote Response Time

The Contractor shall deliver all required services remotely (performed by a DCT) within 1 hour from the Service Request sent by Frontex via SPC.

2.2.2.4. On-Site Response Time

The Contractor shall deliver all required services On-Site (performed by a DCT) within 6 hours from the Service Request sent by Frontex via SPC.

2.2.2.5. Repair time

For problems or incidents that cannot be solved remotely within the Remote Response Time, the Contractor's DCT shall use any efforts to bring the covered hardware or software to operating condition. This shall be done within the time specified below from the moment the initial Service Request is sent by Frontex.

- For non-redundant components, which may have an impact on DC operations the Repair Time cannot be longer than 72 hours
- For redundant components, not impacting DC operations, the Repair Time cannot be longer than 14 days

The Contractor shall demonstrate to the DCS that the Service Request is solved, by issuing a summary report. Service Request is considered as closed only when confirmed by DCS, by signature on written report or by e-mail to SPC.

2.2.2.6. Work to Completion

Once the DCT arrives at Frontex site, s/he shall continue to deliver the service, until the products are operational or as long as reasonable progress is being made. Work may be temporarily suspended if additional parts or resources are required and shall be resumed when they become available. The Contractor shall apply the fastest solution for acquiring the necessary parts and resources to bring Frontex Data Centre to its previous operational status. In any case the incident shall be solved as described in the Repair Time chapter.

2.2.2.7. Escalation Management

The Contractor shall establish a formal escalation procedure to facilitate the resolution of complex problems and shall inform Frontex DCS about the escalation and progress. The AM shall coordinate the problem escalation, making sure that the appropriate resources and skills are used to assist with problem solving and incident resolution.

2.2.3. Proactive Services

To prevent any incidents that could disrupt Data Centre operations, the following proactive services shall be implemented:

2.2.3.1. Software Support

The Contractor shall be responsible for all related software products (e.g. web-based interfaces, firmware and DCIM monitoring system) used for Data Centre operations ensuring the proper operability according to the rules described in chapter Repair Time. All the installations, updates and patching shall be done by the Contractor at no additional cost without disrupting Data Centre operations. In case the applied software will cause any error or malfunction, the Contractor is obliged to remove the problem and return to the previous operating state within the time described in the chapter Repair Time.



The Contractor shall provide Frontex with access to electronic and web-based software-related tools and services at no additional cost. This shall include access to knowledge databases and software patches.

2.2.3.2. Cleaning Service

The Contractor shall use proven techniques to remove dirt, dust, and other contaminants from DC area by means of environmentally friendly cleaning solutions (i.e. HEPA filtered vacuums). Every step during this service should be performed against damage or disruption of Frontex DC operations. The Contractor shall provide three levels of cleaning service for Frontex DC area: exterior hardware cleaning, tops of floor cleaning, and under floor cleaning.

- Exterior Hardware Cleaning
 - This service shall be performed at least twice per year,
- Floor Cleaning
 - This service shall be performed at least once per month,
- Under floor Cleaning
 - This service shall be performed at least once per year.

Precise timeframe of the cleaning services shall be agreed with DCSs at least two weeks in advance.

2.2.3.3. Reliability tests and reporting

The Contractor shall perform all the tests described in the next points without damaging or disrupting Frontex DC operations. All tests shall be performed according to the best practices and warranty rules published or accepted by specific manufacturers. Precise timeframe of these services shall be agreed with DCSs at least two weeks in advance. The Contractor shall conclude the tests by delivering to Frontex DCSs a report consisting, at minimum, of the following information:

- Start and end of works,
- Skills and resources used,
- Results of the tests,
- Lessons learned,
- Recommendations.

Power Redundancy tests

These tests shall consist of:

- Power Generator systems tests (including fuel subsystem), except for the first year of the contract,
- Power installations systems tests related to Frontex DC power infrastructure including:
 - Power STS/ATS switches,
 - Assistance to the building Emergency Power Shutdown buttons (PWP) tests,
 - · Power distribution systems including rack cabinets,
 - UPS systems,
 - Other power sub-systems if necessary.

This service shall be performed at least once per year.

Cooling system check-ups

These tests shall consist of:

- Humidifier/Dryer tests,
- In-Row Cooling units' tests,
- Glycol pipe system switch test,
- Top of the roof chillers units' tests,

This service shall be performed at least twice per year.



Fire Suppression system check-up

The Contractor shall perform reliability tests of fire suppression system without damaging or disrupting Frontex DC operations. All tests shall be performed according to the best practices and warranty rules published or accepted by the specific manufacturers. This service shall be performed at least twice per year.

DCIM monitoring system check-up

The Contractor shall perform reliability tests of DCIM monitoring system (including all sensors) against damage or disruption to Frontex DC operations. All tests shall be performed according to the best practices and warranty rules published or accepted by DCIM manufacturer. This service shall be performed at least twice per year.

3. Appendices

The following appendices are included:

APPENDIX I - The list of Frontex Data Centre equipment and facility systems. The Appendix will be made available after the signature of the Declaration of confidentiality presented in Appendix II

APPENDIX II - Declaration of confidentiality

APPENDIX III - Service Level Agreement template

APPENDIX IV - Security rules for contracts involving Frontex ICT systems