



International Organization for Migration (IOM)
The UN Migration Agency

Reference No. : UA1-2018-3033

BID BULLETIN NO. 3033-01

Provision of services for design, installation, setting up and implementation of the equipment and software for distributed, high availability infrastructure, in primary and secondary Data Processing Centers of the State Migration Service of Ukraine

11 January 2019

The Bids Evaluation and Awards Committee of IOM Ukraine hereby issues Bid Bulletin No. 3033-01 to answer the following requests for clarifications:

- 1. Please provide detailed information on the quantity and types of available operational environments (server OS and its versions) as foreseen under ToR clause “3.2 Components: FTP servers; Web servers; Database servers; Cache servers; AFIS servers; Digital signature servers; Data backup servers; Data storage system”**

IOM’s Official Answer:

Detailed information on quantity and types of operational environments’ elements will be provided to the winning bidder before start of works. For preparation of the proposal and cost calculation, please be informed that the State Migration Service of Ukraine (the SMS) uses Unix- and Windows- like operational systems.

- 2. Please provide list of the available program components and correspondent software licenses used for functioning of USDR and UIASMMP following ToR clause “4.3.2 Reliability requirements”.**

IOM’s Official Answer:

Two Supervisor 2 Enhanced (N77-SUP2E) modules are available

- 3. Please provide total volume in GB and calculations of data recovery time from backup copies as confirmation to ToR clause “4.3.2 Reliability requirements” and requirement stated as “Recovery Time must be 16 hours (including deployment and customization of special software on server hardware)”.**

IOM’s Official Answer:

Emergency recovery plan and calculations of data recovery time from backup copies will be provided to the winning bidder before start of works.

4. **With reference to ToR clause “4.3.2 Reliability requirements” namely provision stipulated as “Hardware and software recovery should take place within 60 minutes after the general software reboot” please clarify recovery of what exactly should take place in 60 minutes as required?**

IOM’s Official Answer:

According to emergency recovery plan time for recovery of all DPC systems shall be not more than 60 minutes.

5. **Following ToR clause “4.5 Data backup and recovery” and namely requirement that data backup and recovery service should cover services of the USDR and UMMID services, please indicate sub-system components which are subject of back-up copy and recovery as well as volume of these subjects (in Gb / Tb) and required period of back-up copies storing.**

IOM’s Official Answer:

ToR specification contains existing license, which covers 15 Tb of data. According to preliminary estimations of the SMS, this volume ensures required scope of data backup and restoring of critical data. List of sub-system components will be provided to the winning bidder before start of works.

6. **Following ToR clause “4.5 Data backup and recovery” please indicate whether regulatory or other requirements apply to the period of archive data storing. If so, please provide details.**

IOM’s Official Answer:

There are no normative, regulatory or other requirements to the period of archive data storing. In this regard, please consider period of archive data storing as termless.

7. **Please note that there is no mention of the tape library for long-term storage of backup / archive copies in the backup and data recovery architecture to enable data recovery in case of failure of the VSP G200 storage system (all backup copies will be lost if this storage system fails). Please confirm the completeness of the provided backup architecture and data recovery architecture.**

IOM’s Official Answer:

According to preliminary estimations of the SMS, please consider decision to use data storage system VSP G200 as system of long-term data storing to be final.

8. **Following ToR clause “4.5 Data backup and recovery” please indicate actual data volume requiring backup copy? According to the specification of the Commvault licenses procured ensured data volume is only 15 TB.**

IOM’s Official Answer:

According to preliminary estimations of the SMS, 15 TB data volume shall cover required scope of data backup and restoring of critical data.

9. **Following ToR clause “4.6 Basic services of computing infrastructure” and namely requirement that “Basic services of the USDR and UIASMMP include the following components: DNS; NTP; DHCP” please provide information on main components of USDR and UIASMMP, as DNS; NTP; DHCP are supporting services.**

IOM’s Official Answer:

The Service Provider's task will be to establish a distributed virtual infrastructure with an available set of hardware and a set of licenses for VMWare, Cisco, Hitachi, etc. Other necessary information on applied landscapes goes beyond the scope of this procurement of services but may be provided to the winner of the tender at the stage of works performance.

- 10. Following ToR clause "4.7 VMware Virtualization Service", namely the requirement expressed as "VMware Resource Virtualization Services should ensure the functioning of the USDR and UMMID in the virtualization environment," please provide details on the components that are services of the EDR and UIA, including version of the OS, type and versions of the database. We also ask you to provide the structural and functional schematics of these services and the flow diagram of these services.**

IOM's Official Answer:

Detailed information will be provided to the winning bidder at the stage of works performance.

- 11. Regarding ToR clause "4.7.4 VMware Components within the Project", the following requirements can be fulfilled when using licenses in vSphere (Enterprise Plus) editions. The specification in Appendix 1 lists the revision license of standard type. Please confirm the completeness of this specification.**

IOM's Official Answer:

According to preliminary calculations of the SMS, please consider the decision to use existing licenses of standard type as final. It is assumed that at the stage of preparation of the technical plan, solutions that will allow to obtain high availability without using this functional will be developed, in addition to NSX.

- 12. Regarding TOR clause "4.8.1 General Requirements", in particular provision "The control and monitoring system must integrate with the following control systems in the Unified State Demographic Register and the Unified Information and Analytical System for Management of Migration Processes: Cisco Prime Infrastructure (PI); Cisco Access Control Server (ACS); Cisco Prime Collaboration; VMware vCenter» please provide details on the components that make up the data services, including OS versions, the type and version of the database. Also, we ask you to provide a structural diagram and flow diagram of these services.**

IOM's Official Answer:

Currently, SNMP is the most common protocol for data exchange for devices and services. Detailed information will be provided to the winning bidder at the stage of works performance. For calculation purposes, please be informed that the SMS uses Unix- and Windows- like operational systems.

- 13. Please clarify the discrepancy in the English and Ukrainian versions of the ToR: The English version contains the paragraph "4.9 OpenStack-based resource virtualization subsystem." System structure and performance requirements ", while the Ukrainian-language version does not provide guidance on virtualization based on OpenStack. Which of the provisions is shall be considered as correct?**

IOM's Official Answer:

This is an editorial error. This requirement shall be taken into account without the words "OpenStack".

14. Regarding TOR clause «4.9.2 System diagnostics requirements», in particular provision «The ITS has to provide tools for key processes diagnostics, tracing and process execution monitoring. Components should offer a usable interface to review diagnostic events and monitor program execution. In case of software exceptions or errors, diagnostics tools must enable collection of the full information needed for the developer to identify problems (screenshots, memory and file system status)». Technical specification in appendix 1 to TOR does not contain hardware and software parts that meet the requirements specified in clause 4.9.2 of the TOR. Please clarify whether Proponents need to offer appropriate solutions, including the necessary hardware and software, as part of their proposal?

IOM's Official Answer:

This requirement shall be disregarded and consider as excluded from the Terms of Reference.

15. Regarding TOR clause “7. Trainings requirements” namely the requirement expressed as “The Contractor shall provide training documentation (hard copy and soft copy) in English” please indicate required type of training documentation: official training materials of the manufacturer or self-developed (by the Service Provider)?

IOM's Official Answer:

Training documentation shall be developed by Service Provider on its own.

16. Regarding TOR clause “7. Trainings requirements” namely the requirement expressed as «Contractor shall include all the training courses necessary for the operation and maintenance (preventive and corrective), low level troubleshooting, high level troubleshooting, data transcript and implementation, design and dimensioning of the System» please indicate required type of training: official training courses of the manufacturer or self-developed (by the Service Provider)?

IOM's Official Answer:

Training course should be developed by Service Provider on its own.

**Bids Evaluation and Awards Committee
IOM Ukraine**