



International Organization for Migration (IOM)
The UN Migration Agency

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BID BULLETIN NO. 1619-04

Supply and delivery of IT equipment and provision of incidental services of design, installation and integration to the IT infrastructure of the State Border Guard Service of Ukraine

23 September 2019

The Bids Evaluation and Awards Committee (BEAC) of IOM Ukraine hereby issues Bid Bulletin No. 1619-04 to answer the following request for clarifications:

- 1. Does consortium treaty allowed in scope of the prequalification process? If yes in what type it could be implemented?**

IOM's Official Answer:

IOM will accept application for prequalification from consortium of companies / joint venture in scope of this prequalification exercise. Companies may collaborate to participate and apply for prequalification as a joint entity in this process. Aside from the charters and registration documents of both companies, the companies should also submit a copy of a joint-venture agreement or similar agreement between them. The agreement should be notarized and should specifically identify the lead-company between the two participating companies, indicating which of them shall take the responsibility to ensure that the joint-entity shall honor the bid(s) the joint-entity will submit. The lead company shall also be responsible for ensuring that the joint-entity will fulfill all contractual obligations of the joint-entity in case the joint-entity will win contract(s) out of the bidding exercise including the provision of the related services.

- 2. With regards to the project team requirements for Lot 1 (clause 2.2.5 in the Bidder Prequalification Instruction) Applicants should propose among their project team at least one CCDP certified engineer. CCDP certification builds advanced knowledge of the network design concepts and principles required to develop multi-layer enterprise architectures and network components. How necessary do you consider certification of Cisco Certified Design Professional, which provides for the qualification of a specialist in designing corporate networks, but not data center networks, in particular, building data center networks using software-defined network technologies? Since this certification is not related to the construction of data centers, we propose to remove it from the list of requirements.**

IOM's Official Answer:

The CCDP certification covers all aspects of modern corporate networks including R&S (routing and switching), security, network services, WAN, and DC (data center). All networking technologies (even software-defined network (SDN) like Cisco ACI) are based on well-known routing and switching principles, which are working "under the hood". Moreover, SDN will not work as a standalone separate element; it will be integrated with existing network islands.

Thus, availability of the specialist with knowledge of all technologies listed above and corresponding design considerations as a single set is very important for successful project implementation and provision of the services by potential contractor.

Requirement for project the team to include CCDP certified engineer remains unchanged.

- 3. With regards to the project team requirements for Lot 1 (clause 2.2.5 in the Bidder Prequalification Instruction) Applicants should propose among their project team at least one Cisco Certified Network Professional Routing and Switching (CCNP RS) or one Cisco Certified Internetwork Expert Routing and Switching (CCIE RS). CCNP RS certification validates the ability to plan, implement, verify and troubleshoot local and wide-area enterprise networks and work collaboratively with specialists on advanced security, voice, wireless and video solutions. How necessary do you consider the certification of CCNP RS, if the project involves the construction of several data centers, and not the corporate network of the enterprise, in particular the construction of data centers using Spine-Leaf technologies, which is not provided for by the qualification of the required specialization? Since this certification is not related to the construction of data centers, we propose to remove it from the list of requirements.**

IOM's Official Answer:

The certification Cisco Certified Network Professional Routing and Switching (CCNP) is a crucial requirement for networking professional. We consider it as a basis to qualify network specialists. Modern SDN solutions provide a lot of benefits. Though, all of them are based on overlay technologies such as VXLAN or NVGRE, which operate using the most standard networking protocols and concepts (as for example, routing protocols, such as IS-IS or IBGP, ACLs, ARP tables, VLANs, VRFs, and so on). Person, who has knowledge and experience with SDN, but does not have either CCNP certification, or corresponding knowledge and experience, will not understand SDN basic components and will not be able to provide high-quality planning, configuration, and troubleshooting functions.

Requirement for the project team to include CCNP RS certified engineer remains unchanged.

- 4. With regards to the project team requirements for Lot 1 (clause 2.2.5 in the Bidder Prequalification Instruction) Applicants should propose among their project team at least at least one Cisco Certified Design Professional (CCDP); at least one Cisco Certified Network Professional Routing and Switching (CCNP RS) or one Cisco Certified Internetwork Expert Routing and Switching (CCIE RS) and at least one Cisco Certified Network Professional Data Center (CCNP DC) or one Cisco Certified Internetwork Expert Data Center (CCIE DC). These certifications do not have qualifications for building a network security infrastructure, in particular, network security core network infrastructure data centers with functionality to prevent intrusions, data leaks and losses in databases and information systems, as well as the ability to stretch DMZ and clustering firewalls between objects. Why does the minimum qualification of applicants in the requirements for engineers to participate in the design team intended for Lot 1 not require specialists with network security certification?**

IOM's Official Answer:

The architecture of the solution does not include specialized security devices, such as firewalls, IPS/IDS, web-Proxy, sandboxes, and so on. Hence, no requirement for the network security specialist among project team. Please also note, that both CCNP RS and CCDP certifications cover certain network security aspects (L2/L3 security features), which are enough for understanding, designing, and implementing best practices of modern network security in the planned architecture.

- 5. Considering description of Lot 1 and requirements for engineers to be included into the project team, we would like to bring your attention to the fact that requested IT infrastructure is fully independent and could be implemented by several leading vendors. In this regard, could you make changes in documentation and remove current requirements to specialists which discriminate all other solutions used by world practice?**

IOM's Official Answer:

This tender is solution based and we expect it to be multi-branded.

Qualified Applicants shall receive the ToR with requirements for the systems not tailored for the specific brand or manufacturer and will be free to offer the solution fitting the requirements and not the specification.

At the same time, in the scope of the assignment, potential contractor will be required to upgrade some of the existing data center systems built on the basis of SBGS's corporate standards that provide usage of Cisco products for network equipment. Upon completion of the project, new infrastructure is expected to be supported by SBGS engineers directly, who should have relevant knowledge on the product.

As mentioned previously, requested certification for the staff is considered as wholesome and comprehensive in different levels of technology knowledge and practice.

6. **Considering description of Lot 2 and requirements for engineers to be included into the project team, we suspect that equipment needed for Lot 2 is Cisco. There are a few notable manufacturers at the market competing against Cisco (such as VmWare, VeloCloud, SilverPack). Would you consider the possibility of fulfilling the task of building a network infrastructure and network security with functionality to prevent intrusions, data leaks and losses in the databases and information systems of two data centers based on solutions from manufacturers other than Cisco? We propose to exclude from cl. 2.2.6 «For the project team designated for Lot 2 there must be engineers contracted full-time with following certification» binding to the certification of engineers from Cisco so that other manufacturers could offer their solutions to this project.**

IOM's Official Answer:

Main purpose of the contractor for Lot 2 is to build reliable secured (encrypted) WAN network that will have great scalability. Described security features (intrusion prevention, data leaks and losses prevention, etc.) will be a benefit and can be further added to the SDN WAN.

In scope of bidding phase of this tender, prequalified Applicants may offer solution of Lot 2 that will correspond to the requirements of the ToR regardless of the brand specifics.

At the stage of prequalification, IOM needs to verify Applicants ability to assemble project team with the certification and qualification of exact level as described in the Bidder's Prequalification Instruction.

7. **According to the description of Compute and Data Storage Layers of Lot 1, the solution should be built on the Hyperconverged Infrastructure, which will be a base for a new virtual environment, and in fact - the base for two modern fault-tolerant Data Centers. But at the same time, the requirements for certification of engineers who will participate in the development of the project (clause 2.2.5) specify only one certification of an engineer who has the competence in building Hyper-Converged infrastructures based on VMware vSphere and vSAN products - VMware VCP 6.5. VMware solutions have numerous deficiencies and there is a lot of other solutions that are better, more efficient, and cost-effective. We draw your attention to the fact that the outcome of the procedure is creation of new systems that do not depend on the existing infrastructure of the final recipient. So we ask you to make changes in Bidder Prequalification Instruction and remove requirement for VMware specialization.**

IOM's Official Answer:

The best solution for Hyper-Converged infrastructure and virtualization shall be chosen upon consideration of all proposed options, provided in response to TOR, specific conditions and requirements, also taking into account the cost, features, simplicity, scalability, availability of experienced engineers, etc. Applicants should take into account, that existing infrastructure of the beneficiary uses VMware solutions, and is supported by SBGS's engineers, who have technical knowledge on VMware products. New system will not depend on the existing infrastructure but still will be integrated with it. So, the solution applied on the new infrastructure should be compliant with those that are used on existing infrastructure. Hence, requirement to demonstrate Applicant's ability to deploy specialists familiar with VmWare virtual environment remains.

8. **According to the description of Lot 1 (Compute and Data Storage Layers) additional upgrade of the storage system components (controller, disk shelf and modernization existing SAN environment), which will be used to extend infrastructure resources of the existing data center, is required. But in "Upgrading Storage System for Migration of Existing Services» part it is said that project requires an additional new storage system with all-flash memory and expansion of ports on two SAN switches in the existing infrastructure. Please provide clear indication of what kind of solution IOM needs for upgrading the storage system – new storage system or upgrade existing storage system components?**

IOM's Official Answer:

SBGS has an existing NetApp cluster, which should be enhanced to cope with growing data and new applications. Such enhancement is expected to be done by means of additional storage system components and extension of licensed ports on the existing FC switch.

9. **According to the best IT practices and trends, if it is necessary to expand the existing storage system, it is more appropriate to consider the option of purchasing a new storage system. The main reason is price and efficiency. Usually when you expand or upgrade existing powerful storage system, you should purchase not only additional disk, disk shelves and network or SAN adapters, but also you need purchase additional licenses and extend support on existing hardware. Also each new generation of storage systems has more powerful controllers (better CPU, more cache). And if we compare the new storage system with the existing one in terms of performance, the new model will have more performance. New storage system always will be better in price/performance ratio. So for Upgrading Storage System for Migration of Existing Services we recommend you purchasing a new storage system in terms of a more efficient solution.**

IOM's Official Answer:

The project requirements implicate usage of the SBGS's existing storage system as NetApp ONTAP cluster is considered as stable, highly scalable and highly available solution with superior performance.

Mentioned benefits can be enhanced by adding additional controllers or disk-shelves. In this regard, new storage system acquisition is not considered within this project.

10. **According to the description of Compute and Data Storage Layers of Lot 1, one of the key components in the designing and implementation of two modern fault-tolerant Data Centers is the Data Backup and Recovery System Layer. Also, the Backup and Data recovery system should consist of hardware and software components. At the same time, the requirements for engineers of the Lot 1 project team indicate the need for only the following certifications: VCP 6.5 Data Center Virtualization, NCPA, CCDP, CCNP RS / CCIE RS, CCNP DC / CCIE DC. None of the above certifications confirms the knowledge of an engineer in building Backup and data recovery systems. And as a result, the potential participant may not have specialists, who will perform the design and implementation of the Backup and data recovery system.**

Please make the appropriate changes to the requirements and extend the deadline for the submission of proposals in order to allow a more detailed and comprehensive review of the requirements and tasks in Bidders Prequalification Instruction.

IOM's Official Answer:

The list of required certifications for the project team of the contractor to implement requirements of Lot 1 will be supplemented with certification in backup and data recovery systems sphere. Therefore, IOM Ukraine amends the Bidder Prequalification Instruction clause 2.2.5 in the following edition:

- 2.2.5 For the project team designated **for Lot 1** there must be engineers contracted full-time with following certification:
- at least one VCP 6.5 Data Center Virtualization certified engineer
 - at least one NetApp Certified Data Administrator (NCPA);
 - at least one Cisco Certified Design Professional (CCDP);
 - at least one Cisco Certified Network Professional Routing and Switching (CCNP RS) **or** one Cisco Certified Internetwork Expert Routing and Switching (CCIE RS);
 - at least one Cisco Certified Network Professional Data Center (CCNP DC) **or** one Cisco Certified Internetwork Expert Data Center (CCIE DC);
 - *at least one certified backup and data recovery engineer according to proposed solution.*

Revised Bidder Prequalification Instruction and Revised Bidder Prequalification Form (Annex 2) are now available to download in the relevant section of Invitation to Prequalify (<http://iom.org.ua/en/node/2914>).

BEAC takes this opportunity to inform all potential Applicants about extension of the application submission deadline until 14:00 EEST, 08 October 2019.

Bids Evaluation and Awards Committee
IOM Ukraine