State Of Palestine
Ministry Of Finance
ieneral Supplies Department

دولة فلسطـين
وزارة المـالية
مديريـة اللـوازم العـامـة

التاريخ :............... الرقم:...............

تنويه صادر عن اللوازم العامة بخصوص مناقصة LWSC-GSD/WB/2023/108
شراء وتوريد وتركيب معدات لمركز المعلومات بتمويل من البنك الدولي
لصالح هيئة تسوية الأراضي والمياه

إشارة إلى الموضوع المذكور أعلاه، يرجى العلم بما يلي:

1- تم تمديد موعد فتح وتسليم المناقصة ليصبح يوم الأربعاء المو افق 2023/7/19 الساعة 11:00 .

2- تم تعديل جدول التسعير و المواصفات الفنية للمناقصة كما هو موضح في الجداول المرفقة.
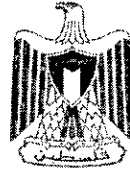
مع العلم أن هذا التنويه جزء لا يتجزء من وثائق المناقصة.

ناصر الخطيب
مكلف بمهام مدير عام اللوازم العامة
رئيس لجنة العطاءات المركزية

State Of Palestine
Ministry Of Finance
General Supplies Department

دولة فلسطين
وزارة المالية
مديرية اللوازم العامة

الرقم: ....

التاريخ: / /

| التاريخ: _____ |
| رقم المناقصة: LWSC-GSD/WB/2023/108 |
| رقم الصفحة _____ من _____ |

9	8	7	6	5	4	3	2	1
السعر الإجمالي لكل بند 9=5 * (6+7+8)	الضرائب والرسوم	ثمن النقل الداخلي والتأمين الى الوجهة النهائية	وحدة السعر/ شيكل DDP	الكميات	الوحدة	تاريخ التسليم	وصف اللوازم	رقم البند
[أدخل السعر الإجمالي لكل بند]	[أدخل سعر الوحدة]	[أدخل سعر الوحدة]	[أدخل سعر الوحدة بالدولار]					
				1	PCS		Modular Servers Chasie	1
				3	PCS		Modular Servers	2
				1	PCS		Brand Name SAN Storage	3
				1	PCS		Monitoring System	4
				1	PCS		Brand Name Backup to Disk Appliance	5
				1	PCS		Brand Name 48U Rack	6
				1	PCS		6 x VMWare Vsphere Standard 1 x Vmware Vcenter Foundation	7
				2	PCS		Brand Name Firewall/UTM	8
				2	PCS		Brand Name Core Switches	9
				1	PCS		Two Factor Authentication	10
				1	PCS		Brand Name WAF	11
				1	PCS		Veeam Backup and Replication Universal Perpetual License 3 years 24x7 Support for (30 VM's)	12
				1	PCS		Tape Library	13
				1			Professional Services	14

| السعر الإجمالي للوازم بالدولار : | |

Tel:02-2987112/3
Fax:02-2987056
gsd@pmof.ps البريد الالكتروني

| Page **2**

تلفون: 02-2987112/3
فاكس: 02-2987056
الموقع الالكتروني: www.gs.pmof.ps

1. Modular Servers Chassie

Item	Specification	Qty
Modular Brand	Modular Brand & Model No.	
Form Factor	Rack.	
Number of Servers	At least 10 servers. Multi chase is allowed	
Management	• Full redundant management module. • Out of band management • Enterprise management system with all needed licenses.	
Power Phase	Single Phase	
Power Supply	Full redundant power supplies (all power supplies should be installed).	
Active Cool Fan	Active Cool Fans (all fans should be installed).	
Interconnect modules	2 x interconnect modules with storage Fabric Support, each module should support: • Internal ports: 2 x 50Gb or (2 x 25Gb + 2 x 32Gb HBA with 32Gb SAN Switch to be included) • External Ports (uplink): should include 2 x 32GB FC + 2 x 100Gb + • Throughput: 6.4 Tbps Full-Duplex. • Module should support 100Gb, 25Gb, 10Gb, 32Gb FC, 16Gb FC, connected to external LAN/SAN switches. • Jumbo Frames: up to 9216 Bytes. • 48K L2 MAC entries. • VLAN Tagging and Link Aggregation on all uplinks.	1
Cables, adapters & Transceivers (All transceivers & DAC cables should be original from the modular vendor).	• 4 x 32Gb Short Wave FC SFP+ 1 Pack. • 2 x 10Gb SFP+ Transceivers for management • 6 x Premier Flex LC/LC OM4 2f 2m Cable • 6 x 100G QSFP+ to QSFP+ 3m Direct Attach Copper Cable. • All transceivers and DAC cables must be same brand • Any other cabling required to run end to end solution	
Licenses	All required licenses should be included & perpetual licenses.	
Warranty & Support	3 years 24x7 support from Vendor.	
Training	Official Abroad Training	1

• Covers the operation and administration for the chassis and its modules, servers, storage, and monitoring system.	
• Travel accommodation, Visa, hotels and all expenses	

2. Modular Servers

Items	Specifications	Qty
Module Brand	Module Brand & Model No. (Should be the same brand of modular).	
Processor	2 x Intel Xeon-Gold 6326 2.9GHz 16-core 185W Processor	
Memory	8 x 64GB (1x64GB) Dual Rank x4 DDR4-3200	
Memory Slots	32 DIMM Slots.	
Hard Drives	2 x 480GB SATA RI SSD	3
Network Controller	2 x 50Gb Converged Network Adapter support 32Gb FC, or 2 x 25Gb and 2 x 32Gb HBA	
Array Controller	SAS Array with 1GB cache.	
Warranty & support	3 years 24 x 7 support from Vendor.	

3. Enterprise SAN Storage

Item	Specification	Qty
Storage Brand	Storage Brand & Model No.	
Storage Level	Entry Level storage not accepted.	
Controllers	• Redundant controllers (dual Controllers). • 2 X 32Gbps FC ports installed per Controller. • Total system ports: 4 x 32Gb	
Availability	At least 99.9999% with no single point of failure.	
Cache	At least 64 GB per controller.	
Capacity	• Should be 150TB effective capacity with 2:1 Data reduction ratio from one tier only. • At-least three-drive failure protection. • 100 K IOPS or more. • Supplier must provide the sizing document from vendor authorized tool	1
Compatible operating systems	Microsoft Windows® Server®, VMware® ESXi™ SUSE® Linux® Enterprise Server (SLES) Red Hat® Enterprise Linux (RHEL) Ubuntu Server Edition LTS,Oracle Linux, Oracle Solaris Citrix® XenServer	

Quality of Service (QoS)	Should be supported and provided Quality of Services (QoS) for controlling the IOPS and MB/sec for a given LUN selectively.
critical storage efficiency features	Storage should have: • Inline de-duplication. • Compression. • Thin provisioning. • Multitenancy Capabilities.
Snapshot	More than 1000 Snapshots per LUN / Volume.
Backup & Replication	• online backup for critical applications such as MS Exchange, SQL, VMware, Hyper-V, Citrix and oracle using application consistent snapshots. • storage-based replication between datacenter for effective data protection with ability to replicate only incremental changes between two sites. • Storage array shall have separate snapshot backup policy between production and DR site.
Licenses	Vendor should provide the license for all functionalities including: Snapshots, Application managed snapshots, Clone, Replication, data Tiering, QoS, LUN Configuration and Management etc., for the maximum supported capacity of array. There shall be no additional software license requirement for future capacity upgrade, and the licenses should be perpetual.
Warranty & Support	3 Years warranty and support 24/7, 4 hour response time from Vendor, with cloud system to: • Predictive support automation. • Proactive management, to predict and prevent any issues before applications have disrupted. • Global learning and a recommendation engine. • Predictive Analytics Engine

4. Monitoring Systems

Specification	Qty

VM and Storage Monitoring System:
 	
To monitor the below:
• VM latency
• Host CPU, memory, and latency
• VMDK IOPS, MB/s, and latency
• Datastore IOPS and MB/s latency
• data analytics and case creation service troubleshoot potential problems:
  ○ Identification of overloaded hosts (CPU and memory)
  ○ Latent VMs by datastore
	1

○ Noisy-neighbor VMs ○ Location of Storage volumes for the VMware datastore • Storage shall have cloud monitoring and analytics engine for proactive Storage management. • All required licenses shall be included and should be perpetual. • Warranty: 3 years warranty & support for all components.	ᴖ

5. Backup to disk appliance

Specifications	QTY
Backup to disk Appliance • Appliance should be designed for Backup purposes • Write Performance: min 22 TB/hr with all needed license to get this performance • Should be support to work over LAN and FC network • Min **55 TB** usable local capacity before deduplication and after Raid 6 and hot spare • Upgrade to **200 TB** usable local capacity before deduplication • Support In-line Deduplication • Deduplication Retain min 15:1 • Installed interfaces o 1 x 10/25Gb 2- ports SFP Network card, • Included licenses: replication and encryption licenses should be included • Warranty: 3 years 24*7 support from vendor	1

6. Tape Library

Description	Qty
Tape Library **Tap Drive:** 1 x LTO-8 Fibre Channel Drive **Management interface:** 1GB Ethernet. **Maximum Number of Drives: 2** **Number of Slots: 24** **Bar code reader:** included **Capacity (2.5:1 compression):** 720 TB (1 x LTO- 8) **Data Transfer (Native):** 100MB-300MB/s **Web-based remote management:** Included **Form Factor:** 2U, Rack Kit Included	1

Led Indicators

Tape Cartridge included:
- **24 x** LTO-8 Ultrium 30TB RW Data Cartridge
- **1 x** Ultrium Universal Cleaning Cartridge
- **1 x** LTO-8 Ultrium RW Bar Code Label Pack (100)

Warranty: 3 Years 24x7 support from vendor

7. Virtualization

Specifications	Qty
VMware vSphere Standard 1 Processor	6
VMware vCenter Server Foundation	1

8. Backup Software

Specifications	Qty
Veeam Backup and Replication Universal Licenses perpetual for 30VM	1

9. Data Center Core Switches

Description	Qty.
I/O ports and slots: • 48 ports of 25G SFP/+/28 • 8 ports of 40GbE/100GbE (QSFP+/QSFP28) **Additional ports and slots:** Power Supplies: 2 field-replaceable and hot-swappable power supplies Fans: hot-swappable fans Management: RJ-45 serial and USB-C console **Performance** • Throughput 2,000 Mpps (Packet per second) • Switching capacity minimum 6 Tbps • Maximum VLANs: 4,040 **Memory:** • Packet Buffer: minimum 32MB **Management:** ○ Centralized configuration with validation for consistency and compliance ○ Time savings via simultaneous viewing and editing of multiple configurations ○ Customized validation tests for corporate compliance and network design ○ Automated large-scale configuration deployment without programming ○ Network health and topology visibility **Warranty: Limited Lifetime Warranty**	2
1 x 100 Gb DAC cable (same switch brand)	2

10Gb SFP+ genuine (same switch brand)	10
25 Gb DAC cables with 5 m (same switch Brand)	10
1Gb RJ45 adapter	6

10. Enterprise Cabinet

Description	Qty
42U 600mmx1075mm Rack Cabinet with Side Panels and Baying	1

PDU Power Distribution Unit:
• Dedicated for Servers and Datacenter usage
• 0U vertical form factor
• Power Outlets:
    o 36 x c13 outlets
    o 6 x c19 outlets
• Power Phase: Single
• Input Voltage Range: 220 - 240V
• Input Plug Type: IEC 32A, 1ph
• Input Current: 32A
• Circuit Breakers: (2) 1-pole, 16A
• locking input power cord feature included
• 3 years warranty
• operating temperature levels up to 60°C
	2

11. Enterprise Firewalls

Description	Qty

Enterprise Firewall:
 	
IPv4/IPv6 Firewall Throughput: minimum 70 Gbps
Threat Protection Throughput: 8 Gbps
Concurrent Sessions: 7 million minimum
New sessions per second: 500,000 minimum
Client to gateway IPsec VPN Tunnel: 45,000 minimum
SSL VPN Throughput: 3 Gbps minimum
Ports:
    o **16 x 1Gbe RJ45**
    o **Minimum 8 x 1Gb SFP**
    o **Minimum 4 x 10Gb SFP+**
Included SFPs: 4 x 1Gb SFP, 4 x 10GbSFP+
Power Supply: redundant power supplies
Security Services:
    o IPS security
    o Antimalware, antivirus, mobile malware, sandbox cloud service.
    o URL and web security, Video and DNS security.
    o Anti Spam
 	
Support: 3 years 24x7 support and security subscription
	2

12. Two Factor Authentication Solution

Description	Qty
Two Factor Authentication Solution: • Mobile Application Token • OATH time- and event-based OTP generator • Login details pushed to phone for one-tap approval • Mobile Application Security Certified (v3.1) for Android and iOS devices • Patented cross platform token transfer • PIN/Fingerprint protected application • Copy OTP to the clipboard • OTP time-interval display • Serial number display • Token and app management • Self-erase brute-force protection • Apple watch compatibility • iOS (iPhone, iPod Touch, iPad), Android, • Windows Phone 8, 8.1, Windows 10, and Windows Universal Platform • Perpetual License	1000

13. Load Balancer and web application firewall

Description	Qty
Load Balancer and web application firewall **Minimum HW Ports:** • 6 x 1Gb RJ45 ports • 4 x 1Gb SFP • 2 x 10Gb SFP+ **Throughput:** minimum 1Gbps **Internal Storage:** 1TB usable **Web Security:** AI-based Machine Learning, white list, black list, IP address reputation, HTTP RFC Compliant. **Application Attack Protection:** OWASP Top 10, SQL injection, session hijacking, vulnerability scanner. **Security Services:** Malware detection, Virtual patching, Protocol validation, Brute force protection, Cookie signing and encryption, Threat scoring and weighting, Syntax-based SQLi and XSS detection, HTTP Header Security, Custom error message and error code handling, Operating system intrusion signatures, L4 Stateful Network Firewall, DoS prevention, Advanced correlation protection using multiple security elements, Data leak prevention, Web Defacement Protection **Application Delivery:** Layer 7 server load balancing, URL Rewriting, Content Routing, HTTPS/SSL Offloading, HTTP Compression, Caching. **Authentication:** Site Publishing and SSO, RSA Access for 2-factor authentication, LDAP,	1

RADIUS, and SAML support, SSL client certificate support **API Protection** **Management and Reporting: Web user interface, Rest API, centralized logging and reporting** Geo IP Analytics, SNMP, Syslog and Email Logging/ Monitoring **Power supply:** dual hot swappable power supply **Support:** 3 years 24x7 support	

14. Professional Services

Description	Qty
Installation and configuration for all above equipment	1
Three years local support from Partner	1
Domain Controller Upgrade • Create all Machines required on new Environment Main Site. • Install windows server 2019 on all new VMs with latest Updates. • Solve all the issues and cleaning bad items that appeared on old Active directory server to be healthy. • Upgrade and promote Domain Controller with DNS 2019 • Demote old Domain Controller and remove DNS role. • Create Secondary Domain controller 2019 with DNS. • Company should have at least 2 certified Microsoft engineers	1