



OIL & GAS DEVELOPMENT COMPANY LIMITED
PROCUREMENT DEPARTMENT (LOCAL), ISLAMABAD
SCHEDULE OF REQUIREMENT

Material : **STORAGE AND SAN SWITCH UPGRADATION**

Due Date:

Tender Enquiry No: **PROC-LH/PT/SYS-18132**

Bid Bond Value : RS. 1,232,500/-

EVALUATION WILL BE CARRIED OUT ON FULL

Attachment(if any) : YES

Sr No	Description	Quantity	Make/Brand offered	Unit	Unit Price (PKR) Inclusive Of All Taxes Except GST	Unit Price (PKR) Inclusive of GST	Total Price (PKR) Inclusive of GST	Delivery Period Offered	deviation from Tender Spec. If Any
1	Storage (NAS) inclusive of all accessories as mentioned in TOR	1		Number					
2	19TB useable upgrade on SAS Tier for Mission Critical Storage as mentioned in TOR	1		Number					
3	SAN Switches upgrade as mentiond in TOR	1		Number					
4	Professional Services for NAS Cluster installation/configuration and upgrade as mentioned in TOR	1		Number					
5	Maintenance & Support Services for 03 years as mentioned in TOR	1		Number					

Special Note: The prospective bidders also download the master set of Tender Document

- The prospective bidders may keep in touch with OGDCL web site for downloading the clarifications/amendments (if any) issued by OGDCL.
- DELIVERY TERM: WITHIN 80 DAYS FOR DELIVERY OF HARDWARE AND 60 DAYS FOR COMPLETION OF PROJECT. PAYMENT TERMS: 60% AFTER DELIVERY OF HARDWARE (EXCLUDING SUPPORT SERVICES) AND 40% AFTER COMPLETION OF PROJECT.



OIL & GAS DEVELOPMENT COMPANY LIMITED
PROCUREMENT DEPARTMENT (LOCAL), ISLAMABAD
SCHEDULE OF REQUIREMENT

Mandatory Checklist

Please confirm the compliance of the following mandatory information along with the bid(s) (failing which bids(s) will not be accepted)

Documents	To be Attached with the Technical/Financial Bids	Compliance	
		Yes <input type="checkbox"/>	No <input type="checkbox"/>
Original Bid Bond	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Copy of NTN Certificate	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Copy of GST Certificate	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Confirmation that the Firm is appearing on FBR's Active Taxpayer List	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly signed and stamped Annexure-A (Un-priced)	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly filled, signed and stamped Annexure-B	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly filled, signed and stamped Annexure-D	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly filled, signed and stamped Annexure-L on Company's Letterhead	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly signed and stamped Annexure-M on Company's Letterhead	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly signed and stamped Annexure-N on Non-Judicial Stamp Paper duly attested by Notary Public	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly filled, signed and stamped Annexure-A (Priced)	Financial Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly filled, signed and stamped Annexure-C	Financial Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly filled, signed and stamped Annexure-E	Financial Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>



OIL & GAS DEVELOPMENT COMPANY LIMITED
PROCUREMENT DEPARTMENT (LOCAL), ISLAMABAD
SCHEDULE OF REQUIREMENT

For the Vendors/Contractors who opt to submit Bank Draft/Call Deposit/Pay order against Bid Bond/Performance Bond, our Accounts Department has finalized an arrangement for online payment to such Vendors/Contractors, which will be processed through (IBFT & LFT) for which following information is required:

i.	IBAN No. (International Bank Account Number 24 Digits)	
ii.	Vendor Name as per Title of their Bank Account	
iii.	Contact No.of Company's CEO/ Owner (Mobile & Landline)	
iv.	Bank Name.	
v.	Bank Branch Name and Code	

Name, Sign and Stamp of the authorized official of the Bidder(s) _____

**UPGRADE OF STORAGE, SAN SWITCH PORTS &
PROCUREMENT OF NEW SCALE-OUT NAS**

Terms & Conditions

Note: Bidders are requested to read this document carefully and provide complete information required in this T&C. All information required in the Vendor Qualification & Professional Staff details must be provided. OGDCL reserves the right to reject Proposals with in-complete or partial information.

INTRODUCTION TO WORK

OGDCL Systems department intends to upgrade its current storage infrastructure with minimum disruption and add new scale out NAS solution for its future requirements. OGDCL requires a solution which can scale as per the current and future performance and capacity growth requirements for different applications including newly installed Document Management System - FileNet. OGDCL Datacenter facility is also hosting various applications like Maximo, Medical Management System, Leave Management System, Email System, ORACLE System etc.

The bidder has to offer a proposal which should consist of the following jobs;

- Upgrade of 19TB usable on existing storage and 24 x 16Gbps SAN switch ports
- Procurement of scale-out NAS with 80TB usable & 3 years support services.
- Installation/configuration and deployment of Scale-out NAS solution.

PROPOSALS

The firms are required to send Financial Proposal as well as Technical Proposal for this project in separate sealed envelopes.

TECHNICAL PROPOSAL

Technical Proposal should be submitted covering the following details;

- i. Brief about the Firm, its support facilities with years of service in Pakistan.
- ii. Details about the solution provided as per Annex I
- iii. Details of M&SS (maintenance & support services) as per Annex II
- iv. Expertise available with brief CVs of the professionals within Pakistan as per Annex III
- v. Details regarding Mandatory Requirements & Technical Evaluation Criteria as per Annex- IV
- vi. Experience of working in large public sector organization.
- vii. Provide the detailed mechanism of annual technical support.
- viii. Schedule of Supply, installation, configuration, testing and commissioning of the proposed solution.

FINANCIAL PROPOSAL

Financial Proposals should give the costs for maintenance & support of all the items associated with the offered solutions for 03 years as detailed below.

- i. Hardware purchase and implementation cost including maintenance and support
- ii. Annual Charges for continuous vendor technical support
- iii. Training Costs if any

DURATION OF PROJECT:

The delivery of hardware should be made within 80 (Eighty) days and project should be completed in 60 (Sixty) days after delivery of hardware. The 03 years support services period will be started after completion/signing off the project. Bidder is required to furnish fortnightly progress reports of the activities under taken in due course of time.

PAYMENT TERMS:

- The 60% of total amount (excluding support services cost) will be paid after delivery of hardware, while remaining 40% payment will be made after completion of project including Installation/Configuration, Testing & Training.
- For Support services the payment will be made on quarterly bases, after performance of services. The support period will be started after completion/signing off the project.

PROJECT DELIVERABLES:

1. New Topology Detailed Diagram including solution hardware
2. Documentation for installation/configuration related to complete project. All the documentation should be comprehensive and well-structured to be submitted both soft and hard copy format. It should include but not limited to
 - a. Detail Project Plan/Project Schedule
 - b. Configuration & Operation Manual
 - c. SOPs for all installation & configurations
 - d. Standard Tagging/Labeling
 - e. Training manuals
 - f. Up-gradation Plan
 - g. Monitoring software details after implementation of new solution.
 - h. User Manual

- i. Testing report

IMPLEMENTATION & TRAINING:

The selected bidder will be responsible for complete implementation and deployment of the new & upgraded infrastructure.

The Bidder will also provide user and administrator level trainings (pre and post deployment) by authorized trainers for nominated person/employee of the company. The bidder will also be responsible for technology transfer of the newly deployed infrastructure for any future enhancements/modification/customization etc.

TESTING OF NEW & MIGRATED INFRASTRUCTURE:

In testing phase, the bidder is required to test new and upgraded infrastructure from every aspect of testing to ensure that all devices works as committed & meets all available standards.

DEPENDENCIES & RISKS:

The bidder is required to submit dependencies & risks involved in project proposal. The bidder can visit the existing data centre of OGDCL before submission of proposal.

(ANNEXURE-I)

Technical Specifications of Storage and SAN Switch Upgrade.

Detail of required upgrades is as under:

Mission Critical Storage Upgrade:

Serial number: 000296801456

- 19TB useable upgrade on SAS Tier.

SAN Switches Upgrade:

Switch-1: 6505

Serial number: BRCCCD1930N04W

- 12 x 16 Gbps port upgrade
- 12 x 10M OM4 LC-LC cables

Switch-2: 6505

Serial number: BRCCCD1930N04R

- 12 x 16 Gbps port upgrade
- 12 x 5M OM4 LC-LC cables

TECHNICAL SPECIFICATIONS OF SCALE-OUT NAS

Item No	Features	Technical Description	Quantity
1	Storage system		1
1	Storage configuration requirements		
1.1	Usable capacity	<ul style="list-style-type: none"> The system must have at least 80 TB usable capacity 	
1.2	Storage Nodes	<ul style="list-style-type: none"> The system shall have at least 4 storage nodes 	
1.3	Back-end network	<ul style="list-style-type: none"> The system must have separate back-end and front-end network. The back-end switches must be included in the proposal. 	
1.4	Rack cabinet	<ul style="list-style-type: none"> Rack cabinet included 	
2	Max Storage Configuration Capabilities		
2.1	The maximum number of nodes per cluster	<ul style="list-style-type: none"> Scalable up to ≥ 250 Nodes 	
2.2	The maximum storage capacity per cluster	<ul style="list-style-type: none"> Scalable up to ≥ 60 PB Storage Capacity Scalable up to 900GB/sec of throughput in the maximum configuration 	
3	Storage Architecture and Functionality		
3.1	CPU architecture	<ul style="list-style-type: none"> The system CPU must be Intel-based processor architecture Each storage node should have at least 01 Intel CPU (4-Core, 2.2 GHz) 	
3.2	Protocols	<ul style="list-style-type: none"> The system must provide a single platform with built-in multi-protocol capabilities including: NFS, SMB, HTTP, FTP and HDFS 	
3.4	Auto Balance	<ul style="list-style-type: none"> The system shall be able to reallocate and rebalance data and make storage space more usable and efficient when adding the new nodes for capacity expansion. 	
3.5	Easy of management	<ul style="list-style-type: none"> The system can scale from 80 TB to more than 60 PB within a single file system, single volume, with a single point of administration. 	
3.6	Cloud ready	<ul style="list-style-type: none"> The system shall support to seamlessly tier of infrequently accessed data to public or private cloud storage options including Microsoft Azure, Amazon AWS, Google Cloud, Alibaba 	
3.7	Investment Protection	<ul style="list-style-type: none"> The storage system shall support the mixing of older and newer hardware, allowing for simple investment protection even across product generations, and seamless hardware refreshes 	
3.8	DR replication	<ul style="list-style-type: none"> The storage system supports asynchronous replication. 	

4	Data Protection and Availability	
4.1	Disk and controller/node failures	<ul style="list-style-type: none"> The storage system can sustain multiple disks and multiple controller/node failures. The system resiliency is provided & supports to tolerate one node (+1n), two nodes (+2n), three nodes (+3n) and four nodes (+4n) failure and mirroring at (2x till 8x mirroring) according to the Protection level policy.
4.2	NDMP backup/restore supports	<ul style="list-style-type: none"> The storage system shall support NDMP 3 & 4 for tape backups & restore of any part of the file system, and support FC tape connectivity directly or via SAN.
4.3	Non-disruptive firmware upgrade	<ul style="list-style-type: none"> The system must support non-disruptive firmware update
4.4	Fault tolerance	<ul style="list-style-type: none"> The system has capability to proactively remove any drive that reaches a particular threshold of detected Error Correction Code (ECC) errors, and automatically reconstruct the data from that drive and locate it elsewhere on the cluster. The removal and the subsequent repair process are fully automated and hence require no administrator intervention; The system shall provide data integrity by implementing 32-bit CRC checksums to protect the file system structures against corruption;
5	Security	
	Role-based access control	<ul style="list-style-type: none"> The system shall support role-based access control (RBAC) options and, if needed, create isolated storage pools for specific departments within the organization.
	Other features	<ul style="list-style-type: none"> The system can support SMB3 encryption, HDFS Transparent Data Encryption (TDE), Security and Technical Implementation Guide (STIG) hardening and multi-factor authentication The storage system supports the Self Encryption Disk (SED)
6	Management and Administration	
7.1	User interface	<ul style="list-style-type: none"> Web GUI and Command Line Interface of storage must be supported
7.2	SNMP capability	<ul style="list-style-type: none"> SNMP monitoring must be enabled and supported
7.3	User authentication	<ul style="list-style-type: none"> The solution must support authenticating users and administrators with NIS, LDAP and Active Directory
7.4	Anti-virus	<ul style="list-style-type: none"> The storage system must support Anti-Virus scanning via iCAP protocol
8	Field Proven and Integration	
8.1	Industry leader	<ul style="list-style-type: none"> The storage vendor must be in the leading position (Top 3) in the Gartner Magic Quadrant Distributed File Systems and Object Storage for the last three years (2017, 2018, 2019)
8.2	Integration	<ul style="list-style-type: none"> The storage system must be in the Software Product Compatibility Reports of IBM FileNet Content Platform Engine.
9	Maintenance and Warranty	

9.1	Maintenance and Warranty	<ul style="list-style-type: none"> • 3 years Warranty & Mission Critical Support 24 x 7 	
-----	--------------------------	--	--

(ANNEXURE-II)

Support Services & Warranty

Warranty:

All quoted hardware must have 03 years complete warranty including parts and labour, warranty period will be started after the installation, commissioning and testing.

Services:

The selected firm will be required to provide maintenance and support services for a period of 3 years, extendable to further 02 years on annual basis with mutual consent.

Detailed Terms and Conditions for 03 Years (M&SS) for Scale-out NAS solution.

1. Access on a 24x7 basis (including holidays) to the Customer Service and Support organization for troubleshooting assistance of products / software preferably onsite, telephonically or through web interface at the earliest (depending upon severity).
2. The support on the purchased hardware (& its running software) along with its maintenance should remain available at least for next 05 years.
3. The period of Maintenance & Support Services (M&SS) agreement is 03 years.
4. The operating software releases of the required storage should be made available by the OEM (when necessary) as updates/patches.
5. The bidder shall visit the facility after deployment periodically to observe system performance and shall inform the focal person in OGDCL.
6. The bidder shall assist OGDCL with power and cooling capacity calculations for the installed equipment.
7. The bidder which fails to conform to the basic eligibility criteria will be technically disqualified.
8. OGDCL will not make any advance payment.
9. The bidder will arrange on-site operations session.
10. The hardware, services for integration of new solution and M&SS cost will be quoted separately by the bidder.

RESPONSIBILITIES OF BIDDER REGARDING STORAGE / M&SS AGREEMENT

1. Delivery of required hardware as per BOQ
2. Assembly of hardware
3. Rack & Stack.
4. Internal connectivity & Power up.

5. Configuration of Storage cluster.
6. Post deployment storage health check (remote) and warranty services as per agreement
7. Business Rule Documentation – BRD as agreed by OGDCL & bidder
8. Weekly onsite support for monitoring and system health check for 3 years
9. Storage volumes configuration & testing as per requirements
10. Bidder will ensure continued provision of the latest version of storage software patches once they are commercially available and applicable for 03 years (+2 years) period.
11. Bidder will ensure the correction of all errors, bugs, deviations or failures in the performance of the Product(s) to ensure that the Product(s) continue to perform in accordance with the specifications and / or documentation. Bidder will keep OGDCL team informed of bug severity level, time interval required for the resolution of issues reported accordingly.
12. Bidder should be able to provide support via email and telephone (during business days and business hours) and the online support portal for reporting malfunctions,
13. Bidder shall provide reasonable telephone assistance by their trained technical representative(s) as soon as possible after OGDCL placement of a call, but in no event more than four (04) business hours after OGDCL notification of the Product(s) failure to conform to the specifications and / or documentation in a material manner.
14. Restoration time of storage should not be more than 24 hours, in case of failure/malfunctioning.
15. Bidder shall be able to provide expert local / global support in case of any issue related to hardware and software,
16. Bidder shall provide query resolution timeline based on the severity of issue.
17. Bidder shall be able to deploy resources onsite in OGDCL premises (if required),
18. Bidder shall clearly state response timelines for onsite support engineer deployment.
19. Bidder shall be able to replace faulty hardware as per part of the scope.
20. Bidder shall communicate response timeline for faulty parts replacement to OGDCL.

Annex III

Professional Staff Details

The bidder shall provide Resumes of the following staff:

<u>S. No</u>	<u>Role</u>	<u>Experience (Yrs)</u>	<u>Certification</u>	<u>No.</u>
1	Storage Specialist	10	Any relevant	01
2	Project Manager	05	PMP	01
3	Technology Architect	10	Any relevant	01
4	Support Engineers	05	Any relevant	05
5	Support Manager	05	Any relevant	01

Annex IV

Mandatory Requirements & Technical Evaluation Criteria

Note: Bidders are advised to carefully read the Mandatory Requirements, Evaluation Criteria and provide complete information in each category in their Technical Proposal. Incomplete or partial information will not be weighed up.

Mandatory Requirements

1. SECP Registration
2. Registered business in Pakistan with an NTN and GST
3. Presence at Islamabad/ Rawalpindi
4. Manufacturer authorization form for all products

5. In-service date of equipment and identify both End of service and End of life.
6. At least 2 references of the similar solution in public sector.
7. Offered Solution OEM must have local support manager with presence of support staff and spare depots in three major cities of Pakistan.

Technical Evaluation Criteria

Sr. #	Description	Allocated Score	Remarks
1	Company profile Years of experience in storage infrastructure deployment.	25	Firm having 5 year experience will get 20 marks. For each additional one year experience, 01 mark will be given, up to maximum Of 25 marks.
2	Average Turnover for last 03 Years Pak Rupees in Million Please enclose last 03 years audited financial statements	15	Firm with average turnover of Rs. 200 Million will get 11 marks. For each additional 50 Million turnover, 01 mark will be given, up to maximum of 15 marks
3	Professional Experience List of Similar Nature Projects (at least 5) including supply of hardware and support services. Valid documentary proofs/Certificates must be attached	30	Firm having 5 projects will get 25 marks. Firms having more than 5 projects will get prorated score, up to maximum of 30 marks
4	Project team and related staff for project design and delivery as under: <ul style="list-style-type: none"> - 1 x Storage Specialist - 1 x Support Manager - 1 x PMP certified project manager - 1 x Technology Architect - 5 x Support Engineers 	30	Bidder with full compliance will get 25 points, other will get prorated score. (5+5+5+5+10)
	Total Score	100	
	Qualifying Score	75	70% marks are mandatory for each above Serial No

Financial Bid Evaluation Criteria

Only technical qualified bidders will be considered for financial evaluations. Financial bids will be evaluated on full consignment wise.