

OIL & GAS DEVELOPMENT COMPANY LIMITED

TERMS OF REFERENCE (TOR) SCOPE OF WORK(SOW)



TENDER ENQUIRY NO: PROC-SERVICES/CB/P&P-4251/2019

**HIRING OF SERVICES FOR IBM MAXIMO IMPLEMENTATION, THROUGH SUPPLY
OF SERVICES FOR INSTALLATION, TESTING & COMMISSIONING AT NASHPA
PLANT AND INTEGRATION WITH ORACLE ERP**

Note: Master set of tender documents (services) uploaded on OGDCL's website (www.ogdcl.com) is the integral part of this TOR/Tender.

OVERVIEW

The Company intends to engage a vendor for extension of IBM MAXIMO Implementation, through **Supply of Services for installation, testing & commissioning at NASHPA plant and integration with Oracle ERP**. Vendors having required expertise, resources and similar work experience are invited to submit their proposals as per detailed requirements given in this TOR.

INTRODUCTION TO WORK

1. Bids are invited for Supply of Services for installation, refining & loading of data in MAXIMO, Integration with Oracle ERP, Testing, Commissioning & Implementation of IBM MAXIMO-Oil & Gas and other existing Add Ons, in accordance with OGDCL Specifications. This system must fulfill business needs of plants operations & Maintenance, job planning, resource planning, safety standards, Work order, maintenance scheduling, material & procurement management etc.
2. IBM - MAXIMO application will be used as centralized system. MAXIMO Servers (Hardware) have been already placed at OGDCL Head office Islamabad and Maximo Software is already implemented with Oracle ERP integration at Head office, Qadirpur, Uch, KPD, Sinjhor, Dakhni Plants & it will be extended to the Nashpa plant through existing available network being in used for the existing Oracle system.
3. Software deployment activities like data entry/loading of Assets, locations, Job plans, PMs etc. & refining, testing, commissioning, integration & implementation will be carried out at Nashpa plant & head office.

REQUIRED SERVICES

1. IBM Maximo has already been integrated with Oracle E-business Suite Modules through Maximo Enterprise Adapter (MEA) for Qadirpur, Dakhni, KPD, Uch & Sinjhor site. Bidders should prepare setups for Nashpa Plant for integration of Inventory, Procurement, Customized Budget Application of Oracle ERP so that the data can be transferred at either side. Detail of existing IT environment is available at **Annex-I**
2. All the software deployment activities like Installation, configuration, testing, data entry & uploading, commissioning & implementation will be carried out at Nashpa Plant & OGDCL head office Islamabad by the bidder.
3. On Site Hands on training of MAXIMO for Maximo operational users shall be carried out at Nashpa Plant and Maximo administration training shall be carried out at OGDCL Head Office Islamabad.
4. All MAXIMO development & customizations against the SDS document will be carried out by bidder team at OGDCL head office Islamabad with coordination of OGDCL team.

Delivery/Completion Period

All the activities including study, Design, development & Integration, testing, training & System GO-Live must be completed within Six (06) months, from the issuance of PO/Service Order.

General Scope & Terms Conditions

1. Bidder's Maximo team should have at least 02 years of experience of IBM MAXIMO implementation (Evidence required).
2. Bidder should depute a dedicated project development & execution team consisting of at least 03 MAXIMO consultants having experience of successful Maximo implementation projects and their CVs should be Verifiable.
3. Bidder Must have branch office in Islamabad (or shall establish office in Islamabad within 30 days from the date of issuance of LOI) equipped with IBM Maximo Professionals and ability to provide 24/7 MAXIMO technical support.
4. Security for bidder team (locals & Foreigners) will be provided as per OGDCL security policy.
5. Vendor will implement all main & sub-modules of MAXIMO-Oil & Gas and existing Add-Ons.
6. Vendor will provide the detailed System Requirement Specification (SRS) document after completion of study phase at Nashpa Plant & head office.
7. Based on SRS, System Design Specification (SDS) document will be provided by vendor, the SDS document must be approved by OGDCL team.
8. Vendor will provide the Maximo operational training at Nashpa Plant & HO team and also provide the Maximo Administration training at head office to Maximo IT team of OGDCL (P&P Department officials).
9. User Acceptance Test (UAT) at head office & Nashpa Plant will be jointly conducted by OGDCL Team & Vendor. All Test cases will be prepared by Vendor must be approved by OGDCL team. Vendor to provide the fixes against defects identified during UAT.
10. 10-20 Reports to be prepared by vendors as per OGDCL requirement and all start centers, KPIs & analytical reports to be prepared in IBM Cognos as already developed for other sites like Uch, KPD, Sinjhoru etc.
11. Existing IBM-MAXIMO environment is available in **Annex-III**
12. OGDCL will provide pick & drop from Islamabad to Nashpa & vice versa, residence & messing at Nashpa plant to implementation team of Bidder . Whereas this facility will not be provided at Islamabad Head Office.

PROPOSALS

The firms are required to send Financial Proposal as well as Technical Proposal for this project in separate sealed envelopes. (Two Envelope Single stage bidding procedure).

TECHNICAL PROPOSAL

Technical Proposal should be submitted covering the following details;

- i. Brief about the Firm, its IBM MAXIMO facilities with years of services.
- ii. Detail to be provided for vender Qualification as per **Annex-II**
- iii. IBM MAXIMO expertise available with brief CVs of the professionals.
- iv. Provide the detail mechanism of six month on site technical support.
- v. Provide project plan with Schedule of Supply, Integration, data templates/loading, Testing, training, Commissioning & Implementation of IBM MAXIMO-Oil & Gas system should be submitted & it should be verifiable for payments.

FINANCIAL PROPOSAL

Financial Proposals should give the costs of all Software & Services associated with the offered solutions as detailed below.

Sr. No.	Description	Quantity	Total Cost (PKR)
1	Cost of services for implementation of IBM MAXIMO along with its existing Add-Ons activities like study, design, development & Integration setups with Oracle ERP, testing, training, installation, data entry & refining, commissioning & implementation at Nashpa Plant & OGDCL head office Islamabad.	Lump sum	
	Total price in PKR (inclusive of all taxes, duties, levies, charges etc., except Provincial Sales Tax (PST)/ Islamabad Capital Territory Sales Tax (ICT) on services in Pakistan)		

Financial evaluation will be carried out on lump sum package basis (i.e. complete package basis) and Contract will be awarded to Technically responsive and Financially lowest evaluated bidder.

BID PRICE:

- i) Bid price must be quoted in PKR otherwise the bid will be rejected.
- ii) Bid price shall be inclusive of all taxes, duties, levies, charges etc., except Provincial Sales Tax (PST)/ Islamabad Capital Territory Sales Tax (ICT) on services in Pakistan.
- iii) The prices quoted by the successful bidder (contractor) for required services shall remain firm and final throughout contract period. The price charged by the successful bidder (contractor) for required services shall not vary from the prices quoted by the service company.

(This clause shall prevail instead of Master Tender document "ITB" clause # 06 'BID PRICE')

Payment Terms/Schedule.

- i. The deductions if any will be incorporated before payment of invoice.
- ii. Payment will be made through cross cheque after deduction of applicable taxes against verified invoices.
- iii. Quoted rates for Sr. No.1 of Financial Proposal will be paid as under:
 - a) 30% after completion of study, SRS & SDS submission, preparation of screens & workflows, data entry/loading, forms setups for Nashpa Plant & head office.
 - b) 20% after completion of MAXIMO integration setups with Oracle ERP for Nashpa plant & head office.
 - c) 20% after UAT with fixing of identified issues & preparation of reports & Go-Live at Nashpa Plant and head office.
 - d) 30% after 2 months of successful implementation & after GO Live at Nashpa Plant and head office.

(This clause will prevail instead of Master Tender document "ITB" clause # 07 'PAYMENT').

Annexure I

Current Oracle ERP

OGDCL is currently running Oracle E-Business Suite ERP that includes Financials (GL, A/P, A/R, Fixed Assets, Cash Management & Treasury), Supply Chain Management (Purchasing & Inventory) and Human Resources (HR & Payroll) and customized Budget Solution modules. Lately four additional modules were added that are Public Sector Budgeting, Internal Control Manager.

Current release of Oracle ERP Applications is 11i (11.5.10.2) while the backend database is Oracle 11g (11.2.0.4)

Hardware platform being used for Oracle ERP Systems is Sun System (T5-2). The specifications of the Hardware are listed below;

Item #	Full Description/Specification
1	Computer Server - Main Unit Enterprise Class RSIC based Server <ul style="list-style-type: none">• (One for Primary Site and one for DR Site)• 2 x 16-Core 3.6GHz SPARC T5 Processors installed• (8MB L3 Cache, 128 Threads, On-Chip Encryption)• 32 x 16 GB DDR3 DIMMs• 4 x 300GB Internal SAS 10Krpm Disks or Higher• 1 x DVD+/-RW Drive• 4 x 10 GB Ethernet Ports Integrated• 8 x 1 PCI-E 3.0 Slots• 2 x DualPort 8Gb FC HBA• 1 x Quad Gigabit Ethernet• 2 x Power Supplies• 1 x 400GB Supported Flash PCIe Card for Oracle Database Smart Flash Cache• Latest Unix based OS, supports Oracle Database Smart Flash Cache
2	Computer Storage - Fiber Channel (FC) Array with Rack (One for Primary Site and one for DR)
3	Backup Server / Backup Appliance Purpose Built / Disk Based Backup Solution (For Primary)
4	Computer Backup Tape Library <ul style="list-style-type: none">• 1 x LTO-6 Drive (Linear Tape Open) Half Height with 8Gbps FC interface• 160MBps Drive Throughput• 30 x Cartridge Slots installed• Operator Control Panel• Remote Management Interface• Barcode Reader• 30xLTO-6 Media• 5xLTO-6 Cleaning cartridge
5	Data Protection and Business Continuity Software Capacity based licenses up to 1TB of user data with deduplication.

Bidder Technical Qualification Criteria

Sr#	Description	Allocated Score	Remarks
1	Bidder's team should have two Successful implementations (Installation, testing, commissioning & implementation, trainings of IBM-MAXIMO. Each implementation = 10 Marks [Evidence Required]	20	If bidder fails to obtain 10 score, his bid will not be further considered.
2	Bidder should have Rs. 500 million annual turnover and provide evidence.	20	For Rs. 500 million and above = 20 score, and for Rs.200-499 million =10 score.
3	Bidder project team should have Verifiable Experience in BIRT or IBM Cognos reporting tool in Maximo implementation. Each implementation = 5 Marks [Evidence Required]	10	
4	Bidder's team should have verifiable Experience in implementation of IBM Maximo – Oil & Gas, industry specific solution. Each implementation = 10 Marks [Evidence Required]	20	
5	Bidder project team should have Verifiable Experience in IBM Maximo Integration with Oracle ERP using IBM MEA adaptor. Each implementation = 10 Marks [Evidence Required]	20	
6	Bidder's team should have experience of at least two successful IBM Maximo support projects. Each Maximo Support = 5 Marks [Evidence Required]	10	
	Total Score	100	
	Qualifying Score	85	

Note: Bidder should meet the qualification criteria mentioned above.

Annexure III

Existing MAXIMO Environment (Hardware & Software)

Sr.	Product	Version
1	Operating System Maximo Database	Windows Server 2012 R2 Standard
2	Operating System Maximo Application Server	Windows Server 2012 R2 Standard
3	IBM Maximo Environment	IBM Maximo for Oil And Gas 7.6.0.0 Build 20151124-1600 DB Build V7600-133
		Tivoli's process automation engine 7.6.0.6-IFIX20161121-1455 Build 20161019-0100 DB Build V7606-50
		IBM Maximo Calibration 7.6.0.0 Build 20161019-0100 DB Build V7600-06
		IBM TPAE Integration Framework 7.6.0.6 Build 20161014-1504 DB Build V7606-24
		IBM Maximo Asset Management Scheduler 7.6.4.0 Build 20161019-0100 DB Build V7640-51
		Oracle Adapter 7.5.0.0 Build 20110805-1549 DB Build V7500-04
		IBM Maximo Asset Management Work Centers 7.6.0.1 Build 20161014-1326 DB Build V7601-41
		IBM Maximo Asset Management 7.6.0.6 Build 20161019-0100 DB Build V7604-01
	Database	Oracle 11.2 (Oracle Database 11g Enterprise Edition Release 11.2.0.4.0 - 64bit Production With the Partitioning, OLAP, Data Mining and Real Application Testing options)
	IBM Cognos	Version 10.2.1

Modular Server Solution – With 4 x Servers		
Item	Description/Features	QTY
Chassis	14 Servers in the Chassis 4 Switch Bays Both Intel and RISC Blade Servers in same chassis Option for 1 GbE switches with 1GbE and 10GbE uplinks, 10GbE switches with 1 GbE, 10GbE and 40GbE uplinks. Option for 56 Gbps Infiniband switches, 8 Gbps FC and 16 Gbps FC switches Option for Converged Network Switches with 10G FCOE internal ports and 1GbE, 10GbE, 40GbE and 8Gbps FC external ports Have 2 x 1Gb Ethernet Scalable Switch with atleast 14 Internal 1 Gbe Ports and 10x external 1 GbE With option for 4x 10 Gbe Uplinks Have the dedicated network path for the management traffic Have 2 x 16 Gbps FC switches with min 14 x 16 Gbps FC internal	01

	<p>activated ports and 6 x 8 Gbps FC external activated ports per switch. Switch must support ISL trunking, NPIV, Fabric watch and Application performance support for external SAN fabric connectivity. Each switch should be scalable for up to 28 x 16 Gbps internal ports and 20 x 16 Gbps external ports for future scalability. Proposed switch should also support multitenancy.</p> <p>have redundant Chassis management Modules</p> <p>Midplane type Passive</p> <p>80 PLUS Platinum-certified” Power supplies with N+N redundancy for full chassis load</p> <p>Supports zonal cooling for energy efficiency</p>	
Blade Server	<p>Processor : Intel Xeon 8C E5-2680 130W 2.7GHz/1600MHz or higher</p> <p>RAM: 8 x 8 GB PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM (64 GB Each Machine)</p> <p>Have minimum 24 DIMM Slots</p> <p>Have 2 x 300GB 2.5in SFF G2HS 10K 6Gbps SAS HDD</p> <p>Supports RAID 1</p> <p>Supports both SAS and SSD drives</p> <p>1 x 4-port 1Gb Ethernet Adapter</p> <p>1 x dual port 8 Gbps FC Adapter</p>	04
Management Module	<p>Xeon 8C E5-2650 95W 2.0GHz/1600MHz/20MB, with embedded 10Gb Virtual Fabric,</p> <p>32 GB RAM</p> <p>10GbE Virtual Fabric Adaptor</p> <p>1 x 1TB SATA/NL-SAS HDD</p> <p>2x200GB 1.8in SATA SSD</p> <p>Lifecycle Management (Create, edit, start/stop, delete VMs) for Hyper-V, VMware and Linux KVM</p> <p>Discovery and Configuration of Chassis Network Elements</p> <p>Profile-based configuration of VLAN connectivity and Quality of Service</p> <p>Automated Logical Network Provisioning – network configuration profile is deployed and moved with a virtual machine</p> <p>Monitor network usage by VM, VLAN, virtual switch, etc.</p> <p>Define Quality of Service (QoS) settings (rate limiting, packet priority)</p> <p>Set alert thresholds (e.g., network congestion)</p> <p>Manages Firmware updates. Shows and install updates needed by your systems. Monitors system compliance. Creates compliance policies to automatically notify you when a system is out of date.</p> <p>Shows and resolves compliance issues to install the missing updates</p> <p>Login and take over Compute node from Administrators console</p> <p>Performs Bare Metal Install remotely</p> <p>Mount DVD drive remotely</p> <p>Automatically detects and log HW Problems</p> <p>Support for Multiple Hypervisors like Vmware, Linux KVM , Hyper V and Power VM</p>	01

Storage	<p>Dual Controller with minimum 4 GB Cache per Controller or above 7 TB Useable Capacity Using 600 GB 10k RPM SAS HDDs With RAID 5 Scalable to minimum 110 or above HDDs and support 100 + Storage Pools Supports multiple platforms like Solaris, HP-UX, SGI IRIX, Linux, Windows, Citrix Xen, MacOS, VMware, OpenVMS, Tru64, NetWare, IBM, AIX, VIOS Supports RAID 0, 1, 5, 6 and 10 Have option / Support for Snaps, Clones and Remote Replication Should include built-in software for Multipathing and Thin Provisioning. Supports Real-time compression for block <i>Supports VMWare and VAAI support</i> Modular expansion capability using expansion enclosures to reduce total cost of ownership. Expansion enclosures and DDMs must be based on SAS 2.0 technology operating at 6Gbps Should support 3.5" and 2.5" disk drives. Have Built in Software for Fully Automated Storage Tiering on SSD and SAS Drives</p>	01
Server Rack	Have all required Redundant PDU's and connectivity cables to power up servers and storage . 25 U, Should be of the same Brand	01
Operating System	All servers installed with latest Licensed Operating System, certified & fully compliant with the CMMS software. (windows)	04

AMOUNT OF BID BOND:

Bid Bond /Bid Security amounting to **PKR: 80,000/- (PKR Eighty Thousand Only)** is to be attached / provided with the technical bid. Please see Master Set of Tender Document for further details.

Note :-

The master set of tender documents (services) uploaded on OGDCL's website (www.ogdcl.com) is the integral part of this TOR.