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REQUEST FOR TENDER

IT TENDER Project Name:

Tender Description : INFORMATION TECHNOLOGY TENDER

Tender Issue Date : 4 October 2024

Tender Closing Date : 31 October 2024



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1. Invitation

- 1.2 Your company is hereby invited to tender for "IT TENDER".
- 1.3 This Request for Tender has been structured to aid you in developing a response that can be critically evaluated based on the set criteria including, but not limited to: Cost, Expertise, Capabilities, SD and BEE. This document will further assist you in preparing your proposal in line with SCVD's requirements and specifications.
- 1.4 Some of the primary objectives for issuing this tender are, but not limited to:
 - 1.4.1 Sourcing the most competitive prices, from companies that possess the required expertise to execute the work as detailed in the Scope of Work.
 - 1.4.2 Maintaining high standards of Safety to our employees and the Suppliers on our sites.
 - 1.4.3 Complying with the BEE requirements set and amended by the Government from time to time.
 - 1.4.4 To identify opportunities (for different sourcing options) to significantly reduce Sefateng Chrome Mine's total cost of ownership (TCO).
- 2.0 All <u>BILL OF QUANTITIES</u> must be sent in excel with a password sent to the following e mail address:

<u>legal@mtcmining.com</u> – BOQ PASSWORD

3.0 INSTRUCTIONS TO TENDERERS

Tenderers shall, when compiling and submitting their tenders, comply with the following:

- 3.1 Tender Completion
 - 3.1.1 The tender shall be fully completed, priced, and totalled in black ink or typed.
 - 3.1.2 No unauthorised alterations shall be made to the tender or to any of the annexures. If any such alteration is made or if the annexures are not properly completed or if these instructions are not properly complied with, the tender may be rejected.
 - 3.1.3 All spaces in the tender document must be completed and/or crossed out. Handwritten or typed alterations to the parts so completed and spaces which have been crossed out must be initialled by the person(s) signing the tender on behalf of the tenderer. This initialling must be immediately beside the alterations or spaces.
 - 3.1.4 Tenderers must ensure that the following details are provided in the tender where applicable:
 - a) Lead time per item.
 - b) This must be indicated in calendar days, for example two (2) weeks will be fourteen (14) days.
 - c) Firm period of tendered prices.
 - 3.1.5 Project Schedule (Implementation Plan) / Proposed Service Level Agreement.
 - 3.1.6 In addition to the tender response requested, Tenderers may submit alternative submissions as options for consideration. Each alternative proposal shall be clearly marked as "ALTERNATIVE PROPOSAL" and should contain sufficient detail to enable SEFATENG CHROME MINE to assess the



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proposal without further reference to the Tenderer and detail the quantifiable benefits that will flow to IFMSA should it elect to accept the alternative proposal.

- 3.1.7 Negotiation list Indicate of clauses to be negotiated detailing.
 - a) The reason why the variation from the proposed contract terms and conditions is required.
 - b) A proposed replacement term or condition

3.2 SCVD Representatives

Commercial Representative:	GARY CRONK
Contact numbers:	060 996 5951
E-mail address:	Procurement2@mtcmining.com
Technical Representative:	MAYNARD VAN GENT
Contact numbers:	+27 10 880 5201
E-mail address:	m@it.co.za

3.3 Tender Submission and Closing Date

- 3.4.1 Closing date is *31 October 2024* at 12h00 (Mid-day).
- 3.4.2 Tenderers shall provide SCVD with one (1) electronic copy.
- 3.4.3 Tenders to be emailed as indicated. Tenderers have a responsibility to confirm receipt of tender by Procurement Department. SCVD accepts no responsibility for tenders that have been mailed or delivered by courier.
- 3.4.4 Tender email address: procurement2@mtcmining.com
- 3.4.5 Late tenders will not be considered.
- 3.4.6 The tender number and description: "SCVD2024/GC/TENDER-0026" must be stated on all documents submitted by the Tenderer. This tender identification shall form part of any subsequent related correspondence and marked for the attention of SCVD personnel detailed in this tender.
- 3.4.7 Proposed pricing must remain valid for acceptance by SCVD for a period of 120 days from the specified closing date.
- 3.4.8 Before the Supplier can undertake any work on the SEFATENG CHROME MINE site, the Supplier must undergo induction trainings and medical examination and approval shall be obtained from SEFATENG CHROME MINE for each person working on the SEFATENG CHROME MINE area.
- 3.4.9 The Tenderer shall allow in its price for at least three days for testing, training, and approvals.



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Induction training shall be arranged with the safety officer of SEFATENG CHROME MINE.

3.4.10 The Supplier shall ensure that all relevant personal protective equipment ("PPE") is available to its employees and those of its sub-contractors. PPE shall always be in good and safe condition.

4. Safety, Health Environment and Quality (SHEQ)

4.1 Safety

- 4.1.1 The Supplier shall demonstrate that its Safety Policy, Safety Systems and Risk Assessments are in place prior to commencing with this project.
- 4.1.2 For any work performed on the SEFATENG CHROME MINE site the Supplier's personnel shall do a medical examination and safety induction at its costs (at SEFATENG CHROME MINE facilities). Work on site shall only commence upon satisfactory completion of employees' medical exams and safety induction and of safety documentation, which shall include risk assessments as may be required by SEFATENG CHROME MINE.
- 4.1.3 The Supplier shall commit to the highest safety standards and in-house and external safety audits shall be done on a regular basis to ensure the safety of staff and plant and the surrounding community. Safety shall never be compromised for production. Sefateng Chrome Mine's policy is to adhere strictly to the provisions of the Mine Health and Safety Act, to which Act the Supplier and the Supplier's sub-contractors and their employees shall always also strictly adhere to.

4.2 Environment

The Supplier shall conform to the following environmental Legislation:

- 4.2.1 Environmental Conservation Act, Act 73 of 1989.
- 4.2.2 National Water Act, Act 36 of 1998.
- 4.2.3 Hazardous Substances Act, Act 15 of 1973.
- 4.2.4 National Environmental Management Act, Act 107 of 1998.
- 4.2.5 Atmospheric Pollution Prevention Act, Act 45 of 1985.
- 4.2.6 Mine Health and Safety Act, Act 29 of 1996.
- 4.2.7 Tender will be subject to the SEFATENG CHROME MINE waste management policy.

5. Evaluation criteria

Proposals will be evaluated against the following broad criteria:

5.1 Safety and Health

The following documents must be submitted with the Tender:

- 5.1.1 Incidents Rates for last 12 months
- 5.1.2 OHSAS 18001:2007/ISO 45001:2018 Certificate
- 5.1.3 Safety Management Systems

5.2 Quality and Environmental

The following documents must be submitted with the Tender:

- 5.2.1 ISO 9001:2015 Certificate
- 5.2.2 Quality Management Systems



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- 5.2.3 ISO 14001:2015
- 5.2.4 Environmental Management Systems

5.3 Technical

The following documents must be submitted with the Tender:

- 5.3.1 Track record of implementing similar projects (include references and their contact details)
- 5.3.2 Suitability of Products or Equipment to be used on this project (include quality of the Materials or Equipment and your suppliers' names)

5.4 Operational

The following documents must be submitted with the Tender:

- 5.4.1 Organizational Structure (Size of the Company)
- 5.4.2 Number of Personnel Employed
- 5.4.3 Pool of Expertise in the Company (include the relevant qualifications of Key Personnel to be involved in the execution of this project).
- 5.4.4 Proof of registration in terms of, and current insurance of, all workmen under the Compensation for Occupational Injuries and Diseases Act.

5.5 Commercial

The following documents must be submitted with the Tender:

- 5.5.1 BEE Certificates (Must show shareholding % held by Previously Disadvantaged Individuals) or an official letter from your Auditor detailing the Shareholding of your company.
- 5.5.2 Full list of names and addresses of directors, members of close corporation, or partners.
- 5.5.3 Registration documents of your company/close corporation.
- 5.5.4 The Supplier's brief company profile.
- 5.5.5 The companies VAT Clearance number.

6. SCOPE

6.1 **Project Overview**

This document outlines the comprehensive Scope of Work (SoW) for implementing various IT and infrastructure solutions, including ERP, reporting systems, VoIP, network switches, access points, fibre optic cables, SFP modules, visual surveillance systems, and disaster recovery plans. The goal is to integrate these solutions to enhance operational efficiency, security, and connectivity across multiple sites.

6.2 **Objectives**

- 6.2.1 Implement a hybrid ERP system integrating local and cloud-based BuildSmart solutions.
- 6.2.2 Establish a robust disaster recovery site and backup strategy.
- 6.2.3 Deploy an enterprise-grade VoIP solution to support up to 16 concurrent calls.
- 6.2.4 Implement advanced Al-driven surveillance and monitoring systems.
- 6.2.5 Upgrade network infrastructure with high-performance switches, access points, and fibre optic connectivity to allow for integration of all systems and expand in the future when needed.
- 6.2.6 Ensure compatibility, compliance, and integration across all systems.



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6.2.7 Provide comprehensive support and maintenance services to maintain operational efficiency.

6.3 **Scope of Work**

6.3.1 ERP and Reporting Systems

- **Server Implementation:** Install and configure the BuildSmart ERP system on local servers with real-time data synchronization to the cloud.
- **Integration:** Connect ERP systems with mining SCADA systems and other business operations to enable comprehensive reporting and dashboard visualization.
- **Dashboard Development:** Develop dashboards that visualize key metrics such as production output and operational efficiency.

6.3.2 **Disaster Recovery Plan**

- **DR Site Setup:** Establish a geographically distant disaster recovery site with high-availability servers and real-time data replication using software such as Veeam or Azure Site Recovery.
- **Data Backup and Replication:** Implement daily incremental and weekly full backups for all critical data, with a retention policy of at least 30 days.

6.3.3 Enterprise VoIP Solution

- **System Requirements:** Deploy a cloud-hosted VoIP system supporting a minimum of 16 concurrent calls and 200 users.
- **Features:** Call recording, advanced call routing, CRM integration, and support for mobile and desktop applications.
- **Network Requirements**: Secure server with minimum 1 Gbps network interface and robust firewall protection.

6.3.4 Network Infrastructure

- **Switches:** Deploy 1U rack-mountable network switches with PoE capabilities, high non-blocking throughput, and Layer 3 features such as inter-VLAN routing and DHCP server support.
- Access Points: Install Wi-Fi 6 and Wi-Fi 6E compatible access points supporting high-density environments and centralized remote management.
- **Fiber Optic Cables**: Install Single Mode and Multi Mode fibre optic cables for both aerial and armoured applications, with compliance to international standards (e.g., ITU-T, IEC).
- **General Requirements:** Provide SFP and SFP+ modules for both copper and fibre connections, supporting data rates of 1 Gbps and 10 Gbps, with hot-swappable capability and digital diagnostics monitoring.

6.3.5 Visual Surveillance Systems

- Al Integration: Implement AI-powered surveillance systems with features such as object detection, behaviour analytics, and real-time alerts.
- **Thermal Cameras:** Deploy thermal cameras for equipment monitoring and staff health screening, integrated with the facility's management system.
- **Vehicle Tracking:** Install vehicle movement and counting systems at key points, integrated with access control and weighbridge systems.

6.3.6 Perimeter Defence

- **Network Security Appliance**: Deploy a network security appliance with deep packet inspection, advanced routing, and failover capabilities to protect the network perimeter.
- **Failover Capability**: Ensure automatic WAN failover between multiple ISP links and support for link aggregation and high availability.
- **Security Services**: Implement gateway anti-malware, intrusion prevention, content filtering, and application control for comprehensive network protection.

6.3.7 Microsoft 365 Data Protection and System Management

Microsoft 365 Integration: Deploy and configure Microsoft 365 applications with security features



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like Azure AD Conditional Access, MFA, and Data Loss Prevention.

- **Data Protection**: Implement Microsoft Information Protection (MIP) and Azure Information Protection (AIP) for data classification, encryption, and secure sharing.
- **System Management**: Utilize Microsoft Intune for device and application management, ensuring compliance and secure access.

6.3.8 Internet Connectivity Solution

- Integrated Satellite and Backup Connection Solution: Implement a bonded internet solution combining multiple satellite connections with backup Internet connection (e.g. LTE) failover to ensure uninterrupted connectivity.
- **Network Configuration**: Configure automatic failover and optimize network performance to minimize latency and ensure high reliability.
- **Installation and Testing**: Conduct comprehensive system tests and provide training for technical staff on system operation and maintenance.

6.3.9 **Support and Maintenance**

- **Network Infrastructure Support:** Provide support for routers, switches, firewalls, and access points, including monitoring, configuration, and performance tuning.
- **Server and Storage Support:** Maintain physical and virtual servers, handle updates and patch management, and manage backup and disaster recovery.
- **End-User Support:** Assist with connectivity issues, network printing, and support for network-dependent applications.
- **Security Management:** Monitor and manage network security devices, handle incident response, and implement mitigation strategies.
- Service Level Agreement (SLA):
 - Critical Systems: 30-minute response time, 4-hour resolution.
 - High Priority: 1-hour response time, 8-hour resolution.
 - Medium Priority: 2-hour response time, 16-hour resolution.
 - Low Priority: 8-hour response time, 48-hour resolution.
- **Contingency Planning:** Implement redundancy and failover mechanisms for critical infrastructure, maintain disaster recovery plans, and conduct annual testing.

6.4 **Technical Specifications**

6.4.1 Server Specifications for ERP & DR Site

- Dual Intel Xeon Gold processors, 256 GB RAM, and 8 TB SSD storage in RAID 10 configuration.
- Minimum 1 Gbps network interfaces with redundant power supplies.

6.4.2 **VoIP System Server Requirements**

- 4 vCPUs, 8 GB RAM, 250 GB SSD storage, Debian Linux or Windows Server OS.
- Secure SIP traffic encryption and SRTP for audio encryption.

6.4.3 Switch and Access Point Specifications

- Switches: Minimum of 24 RJ45 Ethernet ports with PoE capabilities, 2 SFP+ ports for 10G uplinks, and a minimum non-blocking throughput of 88 Gbps.
- Access Points: Support for Wi-Fi standards 802.11a/b/g/n/ac/ax with advanced MIMO configurations and centralized management capabilities.

6.4.4 Fiber Optic and SFP Specifications

- Single Mode Fiber Cable: 9 μm core diameter, attenuation ≤ 0.22 dB/km at 1550 nm, fusion splicing only.
- SFP Modules: Support for both copper (up to 100 meters) and fibre (up to 10 km) connections with digital diagnostics monitoring.

6.4.5 **Perimeter Defence Specification**



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- Appliance Specifications: Minimum 5 Gigabit Ethernet interfaces, support for 50 concurrent VPN connections, and throughput of 1 Gbps for threat prevention.
- Security Features: Stateful packet inspection, advanced threat protection, content filtering, and application control.

6.4.6 **Internet Connectivity Specifications**

- Satellite Connectivity: Bonded solution capable of aggregating multiple satellite connections for higher bandwidth. Desired bandwidth should be minimum 200mbps down and 100mbps up.
- Backup Internet Connection Failover: Support for automatic failover to LTE or other reliable connection with multiple providers for maximum coverage and reliability.
- Network Resilience: Minimum 99.9% uptime with QoS policies to prioritize critical traffic.

6.4.7 **Support and Maintenance Specifications**

- Network and Server Support: Regular monitoring, performance tuning, and configuration management for network and server infrastructure.
- Security Management: Active monitoring of network security devices, incident response, and proactive mitigation of security events.
- Documentation and Reporting: Maintain up-to-date network diagrams, incident reports, and monthly performance and uptime reports.

6.5 **Security and Compliance**

- 6.5.1 Compliance with CE, FCC, IC, and local data protection regulations.
- 6.5.2 Secure communication channels, encrypted data transfers, and comprehensive firewall and intrusion detection systems.

6.6 **Support and Maintenance**

- 6.6.1 Comprehensive support for installation, configuration, and ongoing maintenance.
- 6.6.2 Regular system health checks, bi-annual DR testing, and real-time monitoring.

6.7 **Deliverables**

- 6.7.1 Fully implemented and tested systems for ERP, DR, VoIP, network infrastructure, and surveillance.
- 6.7.2 Detailed documentation, user manuals, and training for IT staff and end-users.
- 6.7.3 Real-time monitoring and reporting dashboards for all systems.

6.8 Evaluation Criteria

- 6.8.1 Technical capability and compliance with specifications.
- 6.8.2 Cost-effectiveness, scalability, and support terms.
- 6.8.3 References and past experience in similar projects.

6.9 **Submission Requirements**

- 6.9.1 Detailed technical and financial proposal with a breakdown of costs.
- 6.9.2 Company profile, past project references, and compliance certificates.

6.10 For more detailed information refer to the following documents:

- 6.10.1 Tender Specification Access Point.pdf
- 6.10.2 Tender Specification Fibre Optic Cable.pdf
- 6.10.3 Tender Specification DR.pdf
- 6.10.4 Tender Specification ERP and Reporting.pdf
- 6.10.5 Tender Specification Internet Connection.pdf
- 6.10.6 Tender Specification Perimeter Defence.pdf



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6.10.7 Tender Specification – SFP.pdf

6.10.8 Tender Specification – Switches.pdf

6.10.9 Tender Specification – User Data Protection.pdf

6.10.10 Tender Specification – Visual Systems.pdf

6.10.11 Tender Specification – VOIP Solution.pdf

6.10.12 Tender Specification – Key Network Sites.pdf

6.10.13 Tender Specification - Support.pdf

6.10.14 Tender Specification – GPS Location.kmz

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