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| **Description of Request** | Supply, Implement. Maintain and Support for Data Centre Infrastructure Management platform (DCMI) as a Service for a  period of five (5) years. |

1. **High level background**

Data Centre Infrastructure management (DCMI) tool is currently implemented at MWP Data Centre, this contract pertains to the support and maintenance of the Data Centre Infrastructure management tool at MWP and for roll outing similar solution to major Server Rooms in the various Eskom regions and integrating them to the MWP platform for managing and monitoring Data Centre and Server Room infrastructure.

The tool should be configured to enable real time asset tracking, monitoring, capacity planning and management of environment operations in the Data Centre and Server Room. The goal of this agreement is to have an ongoing support to the tool to address any issues or updates required during the contract. Also to ensure tool optimal performance.

1. **Scope of work/Business requirements**

The scope of work outlines the requirements and deliverables for establishing a support and maintenance contract for Data Centre Infrastructure Management platform (DCMI) platform. This will ensure seamless functionality, proactive management, and optimised performance of the data centre infrastructure.

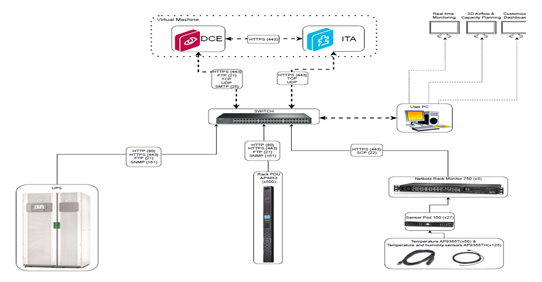


Figure1: High level Overview of a typical DCIM platform

The scope of the service will cover the following aspects:

* Software Security updates and patch management
* Technical support and troubleshooting
* System, optimization, and performance tuning
* Backup and disaster recovery
* Compliance and reporting assistance.
* Training and knowledge transfer
* Scalability and power distribution unit upgrades into intelligent PDUs including all equipment required to the implementation of the Data Centre Infrastructure Management platform (DCMI)
* Solution technology updates (Product Road Map)
* additional licenses
* Configuration updates
* Dynamic thermal management of the main data centre
* Sustainability management

Additional as part of the scope of work to Supply, Delivery, and Implementation of a Data Centre Infrastructure Management platform (DCIM) to enable realisation of the below functions but not limited to:

* System monitoring and health checks.
* Provide real-time device management, alarming, control, reporting trending and configuration capabilities (Renewing 500 existing licenses that Eskom owns and migrating them into new DCE VM activation key)
* Provide data Centre visibility, asset and inventory tracking, and floor—and rack-based views in data centre view.
* Provide planning capability to optimally utilize actual physical infrastructure capabilities via a shared data centre model, which enables efficient equipment provisioning and right-sizing of the data centre.
* Provide Workflow automation, which will reduce human error and deploy best practices across all moves, adds, and changes.
* Rack-level temperature and humidity.
* Branch circuit power monitoring - Metering for all existing circuit powering of 189 racks hosted at Megawatt Park (Branch circuit power monitoring)/Intelligent PDUs. The module/platform to be configured will allow for the monitoring of multi-vendor SNMP enabled devices. In addition, the monitoring system to provide infrastructure
* Management of UPS (Uninterruptible Power Supplies), Power Distribution Unit (PDU), Rack PDU, Computer Room Air Conditioning (CRAC), Environmental Sensors, Surveillance Camera, Multi-vendor devices and other infrastructure systems as specified.
* Power monitoring for efficiency in power-critical environments (PUE).
* Implement and maintenance of the environmental monitoring to 5 PMDC sites (Matimba, Rotek, Middleburg, Simmerpan and Witbank)
* Implementation and configuration of real-time monitoring, user-defined reports and graphs, and instant fault notification and escalation enable quick assessment and resolution of critical infrastructure events that can adversely affect IT system availability. This centralized repository of critical information can be accessed by multiple users from anywhere on the network, creating a consolidated view of the physical infrastructure. Enable a capability on the platform to provide visibility for future trends and to bring greater insights into the health of Eskom’s Data Centre infrastructure for planning and budgeting.
* Enabling customized alarming, which includes alarm and escalation by device, rack, and location to the right people at the right time, enables the data centre operator to react accordingly when issues are triggered by the system.
* Analysis reports produced on the platform, identify, and recommend to Eskom opportunities for future energy savings by tracking power consumption down to individual rack level and other areas of improvement.
* Supply, implement, maintain, and support the DCIM platform and its components for a period of 5 years, including but not limited to: Appliances, Digitalising of PDU, sensors.
* Performing periodic maintenance (system updates) (software updates) (firmware updates) and responding to incidents, requests, changes, and problem tickets according to the Service Level Agreement.
* Integrating with already established Eskom-owned BMS platform /system. Integrating with already established Eskom-owned Environmental monitoring system platform /system.
* Provide training and knowledge plan and implement a plan to transfer knowledge to the Eskom Data Centre staff to manage the end-to-end platform for the period of the contract.

1. **Sites info with addresses**

* See below in Appendix A – the list of sites

1. **Safety**

* Yes. The vendor will be required to provide safety files upon award of the tender and prior to visiting the Eskom sites.

1. **Service Level Agreement requirements**

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| --- | --- | --- | --- |
|  | **Response Time** | **MTTR** | **Availability** |
| SLA | 1 Hour | Next business day | 24\*7 (365 Days) |

See Detailed Service-level agreement (SLA) between Eskom and Service Provider for the provision of Data Centre and Server Room facilities / plant maintenance and upkeeping related services document.

1. **Approvals:**

|  |  |  |
| --- | --- | --- |
| **End user / requestor:**  **Senior manager:** | **Name:** | Dinko Magaoga |
| **Designation:** | Middle Manager - Provisioning & Hosting (Acting) |
| **Date:** |  |
| **Signature:** |  |
| **Senior Manager:** | **Name:** | Tebogo Makhwelo |
| **Designation:** | Senior Manager – Infrastructure Operations |
| **Date:** |  |
| **Signature:** |  |

1. **Appendix A – List of sites**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Server Room** | **Site Code** | **Type** | **Division** | **Province** | **Address** | **No of cabinets** | **Existing DCMI platform** | **New DCIM hardware to be deployed** |
| Acacia | ACP | Server Room | Generation - Peaking | WC | Acacia Power Station, Montague Road, Edgemead | 2 | NO | YES |
| Ankerlig | ANP | Server Room | Generation - Peaking | WC | Ankerlig Power Station, Neil Hare Road, Atlantis | 2 | NO | YES |
| Arnot PS | ARP | Server Room | Generation - Coal | MP | Rietkuil, 1097, Mpumalanga | 4 | NO | YES |
| Belville 1 | BLV | Server Room | Distribution | WC | 60 Voortrekker St, Bellville | 14 | NO | YES |
| Belville 2 | BLV | Server Room | Distribution | WC | 60 Voortrekker St, Bellville | 8 | NO | YES |
| Blackenbergvlei | KBB | Server Room | Distribution | NC | Cnr Aristotle Ave & Hull Street, Kimberley | 14 | NO | YES |
| Bloemfontein | BFN | Server Room | Distribution | FS | Eskom Centre, 120 Henry Street, Westdene, Bloemfontein | 18 | NO | YES |
| Camden PS | CDP | Server Room | Generation - Coal | MP | Camden Power Station, Piet Retief Road, Nucam, 2355 | 5 | NO | YES |
| Drakensberg Comms | DRP | Server Room | Generation - Peaking | KZN | Drakensberg Power Stations, Jagersrust/Bergville, KZN | 13 | NO | YES |
| Drakensberg Equipment | DRP | Server Room | Generation - Peaking | KZN | Drakensberg Power Stations, Jagersrust/Bergville, KZN | 13 | NO | YES |
| Durbanville | BLR | Server Room | Generation - Peaking | WC | 15 Pasita Street, Rosenpark, Durbanville | 10 | NO | YES |
| Duvha PS | DVP | Server Room | Generation - Coal | MP | Old Bethal Road, eMalahleni, 1034 | 23 | NO | YES |
| Duvha ST | DVP | Server Room | NTCSA | MP | Duvha Power Station,old Bethal road,eMalahleni, 1034 | 8 | NO | YES |
| EAL | EAL | Server Room | Corporate | GP | Dale Road P/Bag X13, Midrand, 1685 | 10 | NO | YES |
| East London | ELN | Server Room | Distribution | EC | SOP, Bonza Bay Road, Beacon Bay | 36 | NO | YES |
| Gariep | GRP | Server Room | Generation - Peaking | NP | Gariep Power Station, R701, Gariep Dam | 11 | NO | YES |
| Gourikwa | GOP | Server Room | Generation - Peaking | WC | Gourikwa Power Station, N2, Mosselbay | 8 | NO | YES |
| Grootvlei PS | GVP | Server Room | Generation - Coal | MP | Grootvlei Power Station, Grootvlei,Mpumalanga | 8 | NO | YES |
| Hendrina PS | HEP | Server Room | Generation - Coal | MP | Impala Street, Pullens Hope, 1096 | 10 | NO | YES |
| Ingula | IGP | Server Room | Generation - Peaking | KZN | Eskom Ingula Pumped Storage Scheme, Off R103 into P275 (Bester), Ladysmith | 6 | NO | YES |
| Kendal PS | KEP | Server Room | Generation - Coal | MP | Kendal Power Station R545 Near Ogies | 8 | NO | YES |
| Klerksdorp | KDP | Server Room | Distribution | NW | 22 Golden Avenue, Klerksdorp New Town, Klerksdorp | 9 | NO | YES |
| Koeberg | KBP | Server Room | Generation - Nuclear | WC | Koeberg Nuclear Power Station, R27 Off West Road, Melkbosstrand, 7441 | 10 | NO | YES |
| Komati PS | KMP | Server Room | Generation - Coal | MP | Komati Power Station | 11 | NO | YES |
| Kriel PS | KRL | Server Room | Generation - Coal | MP | Eskom Kriel Power Station. Location: Ogies Road, Kriel | 13 | NO | YES |
| Kusile PS | KUP | Server Room | Generation - Coal | MP | R545 KENDAL/BALMORAL RD HAARTEBEESFONTEIN FARM WITBANK 1035 | 5 | NO | YES |
| Lethabo PS | LEP | Server Room | Generation - Coal | GP | Lethabo Power Station,Farm 1814, Viljoensdrift,Vereeniging | 10 | NO | YES |
| Majuba PS | MJP | Server Room | Generation - Coal | MP | N11, Volksrust, 2470 | 14 | NO | YES |
| Matimba PS | MTP | Server Room | Generation - Coal | LP | Nelson Mandela Dr, Lephalale, 0555 | 8 | NO | YES |
| Matla PS | MAP | Server Room | Generation - Coal | MP | Matla Power Station | 12 | NO | YES |
| Medupi PS | MUP | Server Room | Generation - Coal | LP | Steenbokpan Road, Lephalale, 0555 | 13 | NO | YES |
| Menston |  | Server Room | Distribution | KZN | 3 Menston Rd, Westville | 6 | NO | YES |
| Mkondeni | MKD | Server Room | Distribution | KZN | 1 Portland rd, Mkondeni | 14 | NO | YES |
| MWP2 | MWP | Data Centre | Corporate | GP | Maxwell Dr, Sunninghill, Sandton, 2157 | 189 | YES | NO |
| New Germany | NGY | Server Room | Distribution | KZN | 25 Vallyview rd, New Germany | 5 | NO | YES |
| Palmiet | PYP | Server Room | Generation - Peaking | WC | Palmiet Power Station, Rockview Road, Grabouw | 12 | NO | YES |
| PMDC Matimba | MYP | PMDC | Generation - Coal | LP | Nelson Mandela Dr, Lephalale, 0555 | 10 | NO | YES |
| PMDC Middleburg | MDO | PMDC | Generation - Coal | MP | Middelburg Industrial, 1050 | 8 | NO | YES |
| PMDC Rotek | ERI | PMDC | Corporate | GP | Lower Germiston Rd, Rosherville, Johannesburg, 2094 | 8 | NO | YES |
| PMDC Simmerpan | SPN | PMDC | Distribution | GP | Simmerpan Complex Cnr Power & Lake Road, Denlee Germiston 1401 | 8 | NO | YES |
| Polokwane | PGB | Server Room | Distribution |  | 30 Hans Van Rensburg Street, Polokwane | 10 | NO | YES |
| Rosherville (ERIC) | RVL | Server Room | Corporate | GP | 2094, Elandsfontein 107-Ir, Johannesburg South | 13 | NO | YES |
| Sere | SRP | Server Room | Generation - Peaking | WC | Sere Windfarm, Off R363, Lutzville | 2 | NO | YES |
| Simmerpan DEC | SPN | Server Room | Distribution | GP | Simmerpan Complex Cnr Power & Lake Road, Denlee Germiston 1401 | 40 | NO | YES |
| Simmerpan Dx | SPN | Server Room | NTCSA | GP | Simmerpan Complex Cnr Power & Lake Road, Denlee Germiston 1401 | 23 | NO | YES |
| Simmerpan Tx | JB3 | Data Centre | Corporate | GP | Teraco Campus, 5 Brewery St, Isando, Johannesburg, 1600 | 14 | NO | YES |
| DR Site | TTP | Server Room | Generation - Coal | MP | Tutuka Power Station, Bethal Road, Standerton | 12 | NO | YES |
| Tutuka PS | WTK | Server Room | Distribution | MOU | 28 Langenhoven St | 35 | NO | YES |
| Witbank Network Room | WTK | Server Room | Distribution | MOU | 28 Langenhoven St | 24 | NO | YES |
| Witbank Server Room | WTK | Server Room | Distribution | MOU | 28 Langenhoven St | 20 | NO | YES |