Eskom	Scope of Work Document- Configuration Management System	Document Identifier	240-76439827	Rev	30
		Effective Date	14 September 2021		
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Software	x	Hardware		Outsourcing		Professional Services		Other	

Document Tracker Number	N/A		
Description of Request	Configuration Management System		
Costing Details	Value: N/A	CC/WBS: TBD	GL Account: TBD
Period of service	5 years		

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	Date:	7/12/2021
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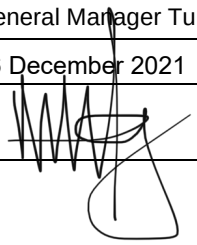
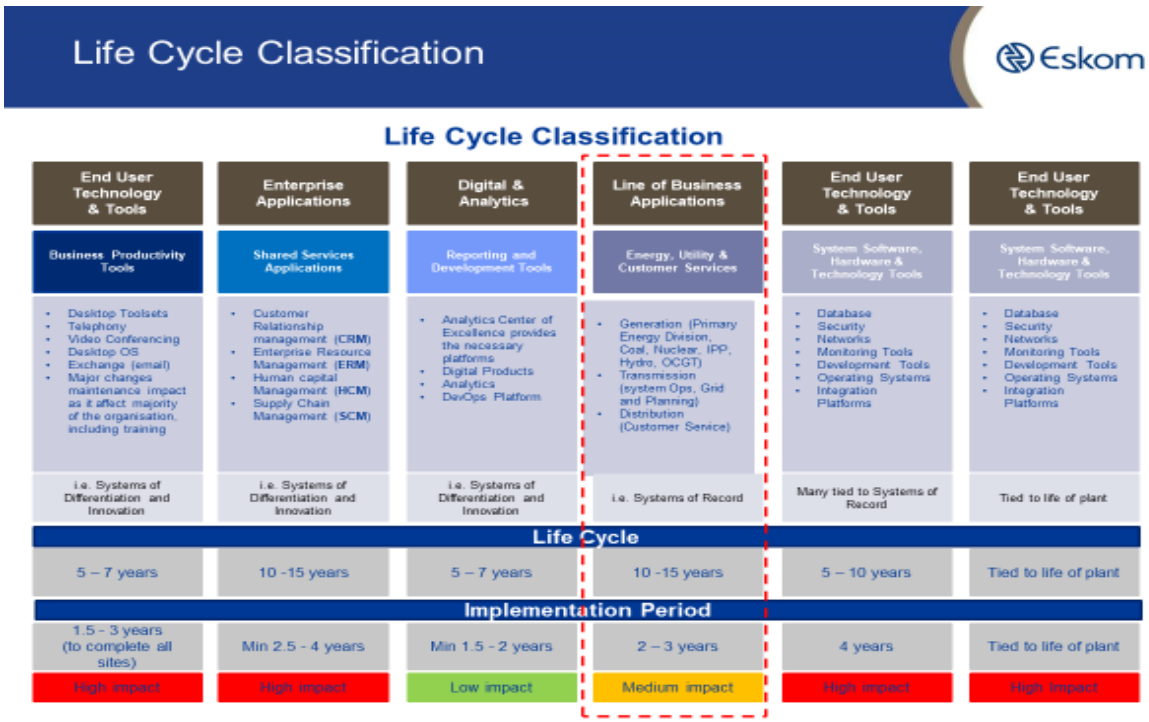
	Signature:	

1. Background Information

ERI Turbo Gen Services does not have a system to assist with effective Product Life Cycle Management specifically focusing on the Configuration Management and component tracking and tracing. The current systems in place does not support the organization in tracking / traceability throughout refurbishment and delivery process.

2. System Lifecycle Consideration

The solution we are looking for is classified under Line of Business Applications as highlighted below:



a. Development Period for new application

Define the period required for development of the system.
2-3 years

b. Support & Maintenance Period

Indicate the period required for Support & Maintenance.
5 years

3. Motivation

a. Business motivation:

By having a unique direct marking (serialization) of various levels of components will enable effective Product Life Cycle Management and support the business in:

- Effective costing allocation per project / component contributing directly to sustainability of the organisation
- Tracking of components through the process by booking components into various work centres (visibility)
- Proper identification of components for project allocation and inventory verification
- Configuration Management with regards to Modular exchange and interfacing between the Inner and Outer Casing

b. Benefits to Eskom

Provide the proposed tangible/intangible benefits to Eskom with the procurement request.

- Accurate Scope of Work and Bill of Material development
- Proper documentation assisting Configuration Management
- Traceability of components
- Warehouse capturing of components
- Spares availability and visibility on a centralized system
- Control of assets
- Reduction of theft and loss
- Good management of routine maintenance

4. Scope of work/Business requirements

The high-level requirements for the business are to have a centralized electronic system that will create, store, and recall technical data pertaining components by having:

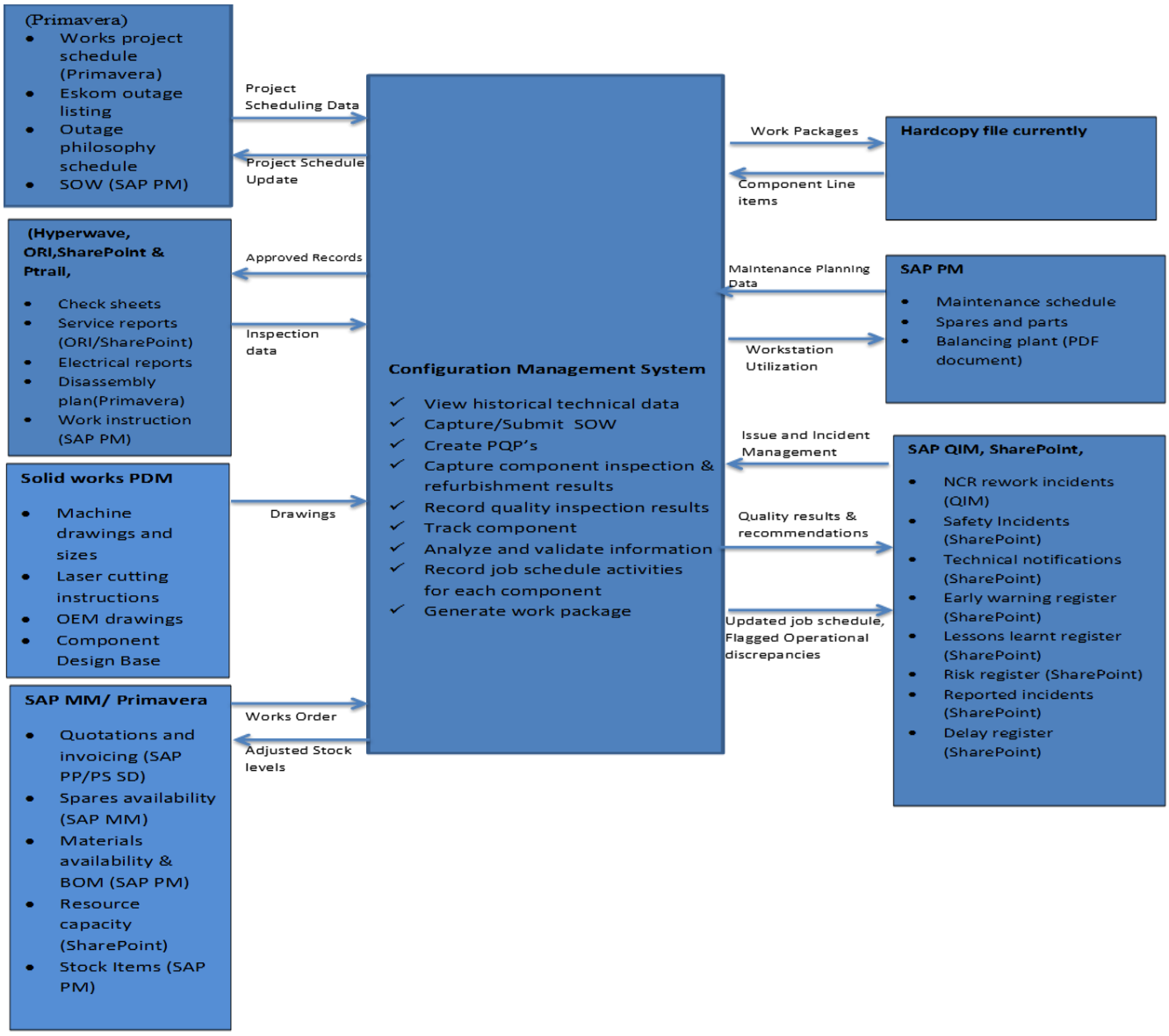
- Centralized -Cloud Based (subject to cloud committee approval) system on the Eskom Network
- Serialized components (Unique identifier)
- Standard generic Scope of Work (SOW) with Bill of Material (BOM) stored in a centralized data management system. SOW needs to cover all possible work that may be completed on the specific component. All BOM, check sheets and PQP's need to be derived from the selected SOW's. Project duration for specific SOW must also be derived based on the selection.
  Electronic check sheet and PQP's at point of use (control points) during the refurbishment phase (Control points will be the identified at work centres).
- Provision must be made for wireless connection
- Handheld scanners to effectively track components at the control points. Handheld scanners are available but will be required to be integrated to the proposed solution.
- Data packs automatically generated from the system.

4.1 Detailed Business Requirements:

Functionality Grouping	Functionality	Business Rules
Register components in the system upon arrival at work centres	Ability to create component identity by: 1. Scanning the marked components into the system (Secondary requirement to procure handheld devices) or 2. Allow manual entry into the system by an authorized person 3. Ability for all Eskom employees to view all technical information pertaining to the registered components 4. Ability to track components as they move through the refurbishment life cycle The Component technical information must be captured according to the following metadata structure: 1. Plant 2. Unit 3. Technology 4. Service Report (Service Report number) a. Monitoring Documentation (Vibration Analysis) b. Module Assembly (HP,IP, LP, Gen etc.) c. Component (Blades, Diaphragms etc.) i. Project Number ii. WBS Elements iii. PQP iv. Engineering Project Number v. Engineering Drawings vi. Serial number	All components to be marked in a legible method and barcode label method. All components to obtain a date and time stamp when scanned
Production Quality Package (PQP's)	1. Ability to develop and print PQP's directly in the system 2. Ability to electronically capture PQP results of a specific refurbishment step on the system 2.1 Electronic identification of operator must be enabled 3. PQP's must be automatically saved on the system when the operator submits the results.	Operator must be authorized to capture PQP results No unauthorized personnel may overwrite original information.
Revision Control	Ability for the system to record all changes/updates made to components captured in the system.	All revisions must be kept as part of the historical information. Latest revisions need to be the only active documents
Component Design Drawings	Ability to view the below listed file formats available on Solidworks The system must support the below listed file formats: The file types available from SolidWorks are: • SOLIDWORKS Assembly (.asm; .sldasm) • SOLIDWORKS Composer (.smg)	Integration to solidworks required

	• SOLIDWORKS Part (.prt; .sldprt) • 3D Manufacturing Format (.3mf) • 3D XML (.3dxml) • ACIS (.sat) • Additive Manufacturing File (.amf) • Adobe Illustrator File (.ai) • Adobe Photoshop Files (.psd) • Adobe Portable Document Format (.pdf) • Assembly Templates (.asmdot) • CATIA Graphics (.cgr) • eDrawings (.easm) • HCG (.hcg) • HOOPS HSF (.hsf) • IFC 2x3 (.ifc) • IFC 4 (.ifc) • IGES (.igs) • JPEG (.jpg) • Microsoft XAML (.xaml) • Parasolid (.x_t; .x_b) • Polygon File Format (.ply) • Portable Network Graphics (.asm) • STEP (.step; .stp) • STL (.stl) • Tif (.tif) • VRLM (.wrl)	
Reporting	• Non-Destructive Testing (NDT) report • Non-conformance reports • Production output reports • Electrical reports • Service Report • PQP (Part 1-4) • Engineering Memo's • Inspection Report • NDE Reports	
Workflow	System needs to have workflow functionality that will include: • Notifications – Email communication • Escalations to higher level after set time as per procedure • Approvals/ Rejections • Acceptance	
Document Management and Data Storage	Centralised Configuration Management Database for document managed and long-term storage and backup system	

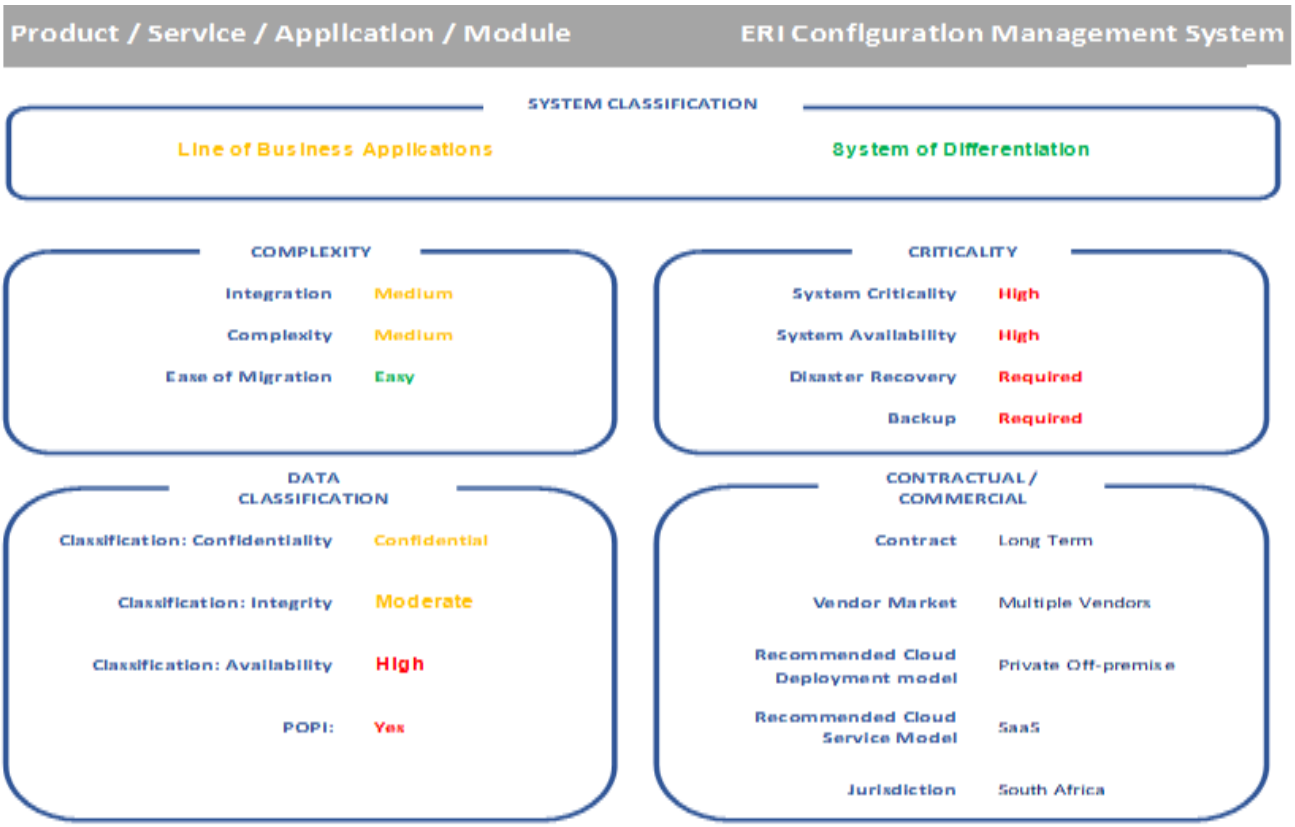
Context Diagram/ Logical Information Flow



Training/Transfer of skills: Role based system training is required for the Configuration Management System.

Technical Information:

1. Encryption of data (in transit and at rest) must be in place.
2. Ensure redundancy at vendor site for network connectivity.
3. Ensure that adequate Cybersecurity controls are in place to protect ERI data.
4. Ensure that the end of service allows for smooth transition from service provider to Eskom
5. Ensure prevention of personal information being disclosed a per POPIA



5. Service Level Agreement requirements

The final Service Level Agreement conditions shall be drafted during the awarding of the contract to the successful service provider. The requirements in this section are high-level minimum requirements that will be considered during the tender evaluation process.

The Service Level agreement shall seek to ensure that the service provider provides the services as stipulated under section 4 of this Scope of Work together with the equipment maintenance, monitoring and support (off- site) for the entire duration of the contract.

The Configuration Management solution is classified as a business-critical application therefore must be available 24*7 with an acceptable down time of between 4-8 hours for system maintenance including repairs and testing.

Disaster Recovery is required as part of the solution.

6. Financial Information (Current system life cycle costs)

The total cost of the project is estimated at R15 Million including software and hardware implementation, maintenance and support, subscription, Disaster Recovery etc.

6. Technical team to form part of the Cross Functional Team (CFT)

List the detail of the technical team members involved – please add more names if applicable:

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Role in CFT:	Project Manager
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