	<p style="text-align: center;"><b>Scope of Work</b></p> <p style="text-align: center;"><b>Research, Testing and Development (RT&amp;D) Research Management System (RMS)</b></p>
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## 1. Background Information:


Research, Testing and Development (RT&D), a business unit under Risk and Sustainability Division, is the custodian of all technical research work in Eskom. RT&D governs research work according to the Project Life Cycle Model (PLCM); namely, the Pilots and Demonstration PLCM and Work Package Framework (240-76479198) and the Research PLCM and Work Package Framework (240-76479262). The work carried out by RT&D also covers consulting and testing services to line divisions and the rest of Eskom. The Research Management System (RMS) should provide an integrated solution for project management; portfolio management; project financial management; and document management.

Decisions made relating to governance by all stakeholders (e.g., Steering Committees and RT&D Investment Committee) involved in the research process need to be captured and recorded in the research management system for reference, quality assurance and audit purposes. All aspects of a project through its various phases of evolution, in as far as is practicable, need to be handled by the RMS.

In the past RT&D used its customised research management system, Track Risk Management Software (TRIMS) to provide amongst other functionality management reports and audit trails. This management system included an integrated functionality of finance, project management, portfolio management, document management and management controls on various levels of approvals. However, TRIMS was not in Eskom standard hence decommissioned and SAP PPM was recommended approved alternate for TRIMS.

To manage research, RT&D had to supplement SAP PPM with Microsoft Excel spreadsheets as it only provides a project management functionality and SAP PPM is mostly tailored for capital projects. This solution is not optimal for the management of research projects as the use of Excel spreadsheets has several shortcomings which include the following:

- Manual intervention prone to human errors
- No access control as all users have no restricted access to sensitive information
- There is no workflow
- There is no integration with other source systems as the results, the business is spending too much of the time consolidating the information from various source systems
- There is no audit trail to trace user activities

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## 2. Motivation

The system that RT&D currently uses for research management does not meet the business requirements. It is not an integrated solution that provides for project management, portfolio management, document management, project financial management and management controls. The system must be augmented with manual spreadsheets, which is inefficient as spreadsheets take time to compile, are difficult to manage and are prone to errors. A research management system, therefore, with all the required functionalities as per the specification is needed for RT&D, to ensure efficient research implementation and prompt generation of management and financial reports for internal and external stakeholders, routinely and on request.

The use of the new research management system will have the following benefits to Eskom:

- Efficient management of the Eskom research process and the associated NERSA-allocated budget.
- Improved value-add by research to the Eskom business.
- Auditable management and financial reports for reporting to internal and external stakeholders, such as NERSA and Department of Public Enterprises.

### 2.1 Business Impact if not implemented


If the required solution is not implemented, the current status quo will remain unchanged i.e.

- No automation of business process and workflow for routing of business tasks and approval electronically; as a result, there is an escalation on paper wastage.
- Manual intervention prone to human errors; that could lead to information integrity risk.
- There is no audit trail to trace user activities.
- There is no integration with other source systems, as a result, the business is spending too much of the time consolidating the information from various source systems.

### 2.2 Benefits

The following are anticipated business benefits for implementing the required solution:

- Increase end user accountability through audit trail
- Increase efficiency by reducing the paper costs through automation process and workflow in order to allow the routing and approval of business tasks electronically.
- Improve information integrity and reliability through reduction of human intervention that is prone to human errors.
- Improve turn-around time by reducing the time consumed consolidating the information from various source systems.

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## 2.3 Support & Maintenance Period

The support and maintenance for this system should be equal the system life-cycle which is 10 years to 15 years.

## 3. Scope of work / Business requirements

Procurement Process, Supply of licences, Research Management Platform Provisioning (On cloud approved), Implementation and Maintenance of a Research Management Solution and that includes the Build, Configuration, Customisation and deployment of the solution, Information Security, Testing, Training, Release Management and Project Close out, and thereafter ongoing Maintenance and Support of Research Management Solution and related software and services.


### 3.1 Business Requirements

#### 3.1.1 High level Requirements


Research, Testing and Development (RT&D) Research Management System is the solution that will be used by the business to capture and store research project information, deliverables, documents, reporting include searching, modification and routing of such information. This will enable RT&D to better achieve its mandate and service to Eskom, by the improved management of the research process, leading to, inter alia, timely delivery of outputs and better management of the research budget. Also, accurate reporting as per the National Energy Regulator of South Africa (NERSA) requirement.

#### 3.1.2 Detailed requirements and Business rules (Functional Requirements)


Functionality grouping	Functionality	Business Rule No and Description
Capture and upload information and documents	Information and document capturing and upload capability	
	Capability to upload research proposals	
	Ability to capture project progress feedback	
	Ability to upload research outputs	Outputs will not always be reports
	Date stamping of final research outputs capability	
	Electronic signing of reports/documents capability	

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Functionality grouping	Functionality	Business Rule No and Description
	Ability to retrieve research outputs from the local system	
	Ability to electronically distribute final research outputs to specified closed group within the organisation	
	Customer feedback invitation from a specified closed, and collation and consolidation of final score capability	
Workflow Management	Workflow capability	
	Submissions of documents and tasks to identified users routing capability	
	Ability to select the person/committee for submission routing	Person/committee responsible for submitted tasks approval must be predefined
	Email notification capability on routed submitted documents and tasks pending for approval	
	Ability for authoriser to approve/reject submitted documents	
	Ability to route tasks and documents to identified users	
	Ability to approve/reject change or modification requests	
	Management Reporting capability	
	Customizable management performance report capability	
Reporting	Program report with details of the projects and associated deliverables, time and budget capability	
	Individual researcher performance with deliverables, time and budget report capability	
	Overdue deliverables for the whole portfolio report capability	
	Ability to filter data based on user's preferred criteria e.g. Report name, dates, submitter, status etc.	The relevant data must be stored and accessible
	Capability to extract data from uploaded documents/fields extraction and export to SAP PS	
User Access Management	User access capability	

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Functionality grouping	Functionality	Business Rule No and Description
	Ability to use user's Eskom credentials to sign-on to RMS application instead of using multiple credentials	
	User restriction based on authorised access to certain information and documents capability	
Activity Trail	Audit trail capability	
	User changes within the system should be recorded	
	Changes and modification to scope, time and deliverables on project log capability	
	Budget allocation for the life of the project log and tracking capability	
	Project Manager changes log capability	
Project and Programme Management Capability	Project and Programme Management Capabilities	
	Ability to capture project deliverables and associated deadlines	
	Ability to capture project annual budget	
	Ability to capture project scope of work	
	Ability to capture project progress	
	Ability to capture project progress billing	
	Ability to modify project details	
	Ability to change project team	
	Ability to change project manager	
	Ability to monitor project progress	
	Ability to aggregate all project details to programme level	
General Functionalities	Additional requirements	
	Ability to update deliverable progress on a monthly basis	
	Ability to release budget based on project progress.	
	Ability to provide monthly project feedback for budget release purposes	

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### 3.1.3 Non - Functional Requirements

#### 3.1.3.1 User interface requirements

The detailed user interface requirements shall be discussed during design phase. The following are some of the user interface requirements for the RMS solution

- Web based
- Friendly i.e., easy to navigate and use
- Data capturing window(s) include document upload capability
- Workflow capability
- Reporting capability
- Role based access restriction
- Integrated with Active Directory
- Data filtering and presentation tools such as dropdown list, date picker, text box, data grid/data table etc.

#### 3.1.3.2 System Integration requirements

The following are some of the systems to be integrated with Research Management System

- Outlook – Email notifications for workflow notifications.
- SharePoint – Investment Communication docs, for shared access
- Microsoft Office – Export and import reports. Convert the doc to PDF to avoid changes
- SAP PS – Invoices, move bulk payments, Man hours and actual costs (internal and external)

## DOCUMENT ACKNOWLEDGEMENT

*By signing this document, the people listed record their agreement on the contents of this document.*

Product Delivery Middle  
Manager

**Name:** Lizle De Kock




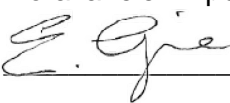

**Signature:**



**Date:**

2022/08/29

**Scope of Work****Research, Testing and Development (RT&D) Research Management System (RMS)**

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