	Request for Information (RFI) Template	Document Identifier	240-72663051	Rev	4	
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		RFI Number	E2794CXMWPTC			

PART A REQUEST FOR INFORMATION (RFI) - E2794CXMWPTC			
Description of the works/ goods/ services	E2794CXMWPTC - AMI test bed solutions, services, platforms, or integrated laboratory environments that can support evaluation of AMI components and use cases relevant to Eskom's smart meter rollout.		
Deadline for submission	05 May 2026	At (South African Standard Time)	10:00
Tender Office address	Tenders are uploaded via Eskom Tender bulletin site on the Eskom E- tendering page.		
Enquiries – Representative	Letsibogo Mahlatji MahlatLN@eskom.co.za		
RFI are to be submitted electronically via Eskom E-tendering site by the stipulated closing date and time. Please note it is the responsibility of the supplier to ensure that RFI submission is submitted before the closing date and time	Tenders are uploaded via Eskom Tender bulletin site on the Eskom E- tendering page.		
Electronic Submission of RFI	<p>The tenderer must upload the tender via Eskom Tender bulletin site on the Eskom E- tendering page.</p> <p>All documents need to be submitted in a PDF and Excel format (The upload size per document is 500 megabytes and total submission is restricted to 4 gigabyte).</p> <p>No Zip/condense files can be uploaded No hard copy will be accepted</p> <p>If for some reason you resubmit your RFI, then the latest version of the RFI submitted will only be accepted and all previous submission/s will be null and void. Please ensure that the submission status is indicated as complete.</p> <p>Supplier Help Manual guide and video can be found on Eskom E- Tendering page</p>		
E-tendering Help Manual for supplier	E-tendering Help Manual attached		

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Eskom Holdings SOC Ltd (“Eskom”) invites you to submit an:

- **Request for information (RFI)** to submit information for the works/goods/services as stated in the table. This RFI is a stand-alone information-gathering and market-testing exercise, intended only to inform and assist Eskom’s further deliberation and development of a strategy for the AMI test bed solutions, services, platforms, or integrated laboratory environments that can support evaluation of AMI components and use cases relevant to Eskom’s smart meter rollout. Eskom may request indicative prices if so, stated in this RFI.

Eskom has delegated the responsibility for this **RFI** to the Representative of this document.

We look forward to receipt of your response.

Yours faithfully



Corporate Procurement Manager

Shamani Padayachee

Date: 14 April 2026

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1. DEFINITIONS

In this Document, except as otherwise defined herein, the following terms shall have the following meanings:

B-BBEE Document	-	<ul style="list-style-type: none"> means Broad-Based Black Economic Empowerment. this document which outlines the requirements of Eskom's further deliberation and development of Oil in water removal by a suitable technology
ERIC	-	<ul style="list-style-type: none"> Eskom Research and Innovation Centre that is located at Lower Germiston Road, Rosherville, Gauteng.
Procurement Process	-	<ul style="list-style-type: none"> Means the procurement process being conducted in terms of this RFI inspect of the Project or requested information.
RT&D Respondent	-	<ul style="list-style-type: none"> Research, Testing and Development, a business unit in Eskom. any entity or consortium that submits a Response to this Document.
State Owned Company or SOC	-	<ul style="list-style-type: none"> a legal entity that is or has previously been created by the Government in order to partake in commercial activities on the Government's behalf, where in the context of the Project, such entity may include any entity with a mandate to engage in the energy or financing sector

2. INTRODUCTION AND BACKGROUND

This Request for Information (RFI) is issued to obtain market information on available approaches, platforms, technologies, architectures, services and commercial models for the establishment of an Advanced Metering Infrastructure (AMI) test bed for Eskom Research, Testing & Development in support of the pending Eskom Distribution Smart Metering rollout.

Eskom seeks information on solutions that support both simulated and real devices, including large-scale meter simulation and end-to-end AMI integration scenarios, to enable investigation of interoperability, functionality, scalability, security and prepayment operation in a multi-vendor environment.

3. MOTIVATION FOR THE REQUEST

The results from the test bed will enhance the decision-making process for the national rollout of smart meters and associated infrastructure in South Africa. In addition, the test bed will ensure compliance to standards and specifications and put Eskom abreast with the AMI developments and international trends.

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4. BENEFITS TO ESKOM

The AMI test bed will provide Eskom with a controlled environment to evaluate AMI components, interfaces, functions and use cases before substantial capital investment is committed to field deployment. This will enable Eskom to assess interoperability, functionality, performance, security and prepayment operation across HES/MDMS platforms, smart meters and PLC gateways under laboratory conditions before procurement finalisation, large-scale rollout, or integration into live operations. In this way, the test bed will reduce technical, commercial and implementation risk by identifying defects, limitations and integration issues at an early stage, when corrective action is less costly and less disruptive.

The AMI test bed will also provide a low-risk platform for the ongoing evaluation of new functions, firmware revisions, configuration changes and additional use cases after field deployment has commenced. This will allow Eskom to test and validate enhancements in a simulated and controlled end-to-end environment before introducing them into an existing production deployment. The test bed will therefore support safer change management, and controlled vendor onboarding, thereby reducing the risk of service disruption, interoperability failures, revenue impacts and operational instability in the live smart metering environment.

5. SCOPE OF WORK/SUPPLY

Eskom requests information from respondents on the scope of supply and services that they would typically offer for an AMI test bed of this nature.

This should include information, where applicable, on software components, hardware components, licences, installation services, integration services, configuration services, commissioning activities, training, user documentation, maintenance support, technical support, and upgrade arrangements.

Respondents are requested to indicate whether their offering is software-only, hardware-assisted, appliance-based, or an integrated end-to-end laboratory platform. Respondents should also indicate whether their solution can be deployed on-premises in Eskom’s laboratory environment and identify any third-party dependencies or infrastructure prerequisites.

6. SPECIFICATION OF PRODUCT OR GOODS

INTRODUCTION

This documentation presents technical requirements in support a Request for Information (RFI) issued by Eskom Research, Testing & Development Business Unit (R, T&D) to solicit information on AMI Test Beds. The following sections herein details these requirements.

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GENERAL

Eskom requests information on AMI test bed solutions suited to DLMS/COSEM-based electricity metering environments that can support laboratory testing, integration testing, interoperability assessment, performance evaluation, troubleshooting and vendor comparison.

Information is required on the extent to which the proposed solution is vendor-neutral and capable of supporting testing of third-party products.

Eskom further requests information on solutions that support testing against both simulated and real DLMS smart meters, including whether the simulated environment can support at least 1 000 concurrent smart meter instances and whether it can be configured to represent different meter profiles, object sets, functional capabilities and security configurations, including IDIS 3 and AC Electricity Smart Meter Generic Profile prepayment functionality.

Respondents should also describe the overall architecture of the proposed approach, including software modules, hardware components, interfaces, protocol analysis capability, databases and reporting functions.

• DLMS METER SIMULATION

Respondents are requested to provide information on the following:

- support for simulation of a single DLMS smart meter and large-scale multi-meter populations;
- maximum number of concurrent simulated meters supported;
- support for configurable meter templates and meter profiles;
- ability to add, remove, or modify COSEM objects and related functionality;
- support for configurable associations, access rights, and security parameters;
- support for configurable register values, profile data, alarms, events, and status conditions;
- support for abnormal, stress, and negative test scenarios; and
- support for repeatable and reusable simulation scenarios.

• DLMS PROFILES

Respondents are requested to provide information on the following:

- support for simulation of a single DLMS smart meter and large-scale multi-meter populations;
- maximum number of concurrent simulated meters supported;
- support for configurable meter templates and meter profiles;
- ability to add, remove, or modify COSEM objects and related functionality;
- support for configurable associations, access rights, and security parameters;
- support for configurable register values, profile data, alarms, events, and status conditions;
- support for abnormal, stress, and negative test scenarios; and
- support for repeatable and reusable simulation scenarios.

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- **DLMS CLIENT TESTING**

Respondents are requested to provide information on capability to test third-party DLMS client systems, including HES and/or MDMS platforms, against simulated and real smart meters.

This should include information on support for:

- functional testing;
- performance testing;
- comparative evaluation of multiple client systems;
- protocol transaction logging;
- trace capture and root-cause analysis; and
- end-to-end AMI use-case execution.

- **DIGITAL-WALLET BASED PREPAYMENT FUNCTION EVALUATION**

Respondents are requested to provide information on how the proposed AMI test bed can support evaluation of digital wallet-based prepayment functionality in which the balance and account logic reside outside the meter and interact with the smart metering environment through the relevant AMI and DLMS interfaces.

Respondents should describe how the proposed environment can support testing of prepayment-related functions and use cases associated with a digital wallet model, including, where applicable:

- account creation and account association to metering points;
- credit allocation and balance update processes;
- charge and tariff application;
- balance enquiry and update verification;
- emergency credit and related controls;
- transaction validation, exception handling, and reconciliation scenarios; and
- end-to-end interaction between the wallet platform, DLMS client platform, and simulated or real smart meters.

Respondents should further indicate whether such testing can be performed using simulation, real meters, the respondent's own DLMS client platform, or a combination thereof.

- **SECURITY**

Respondents are requested to provide information on:

- supported DLMS security suites;
- meter-level or group-level security configuration capability;
- support for authenticated, encrypted, and authenticated-and-encrypted transactions;
- handling of keys, credentials, certificates, and security parameters in the laboratory environment; and
- user access control, audit logging, and administrative security controls of the test bed itself.

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- **TEST AUTOMATION AND REPORTING**

Respondents are requested to provide information on:

- test scripting and automation capability;
- support for reusable test suites and regression testing;
- protocol logging and packet-level trace visibility;
- reporting format and level of detail; and
- graphical analysis, message decoding, and data export capability.

- **TRAINING AND DOCUMENTATION**

Respondents are requested to provide information on:

- user and administrator training;
- configuration manuals and user documentation;
- support arrangements and service levels;
- software update and upgrade approach; and
- licence structure and recurring support obligations.


- **INFORMATION TO BE PROVIDED BY RESPONDENTS**

Respondents should provide, at minimum, the following information in their response:

- company profile and relevant experience;
- overview of the proposed AMI test bed approach;
- description of the overall architecture and main components;
- deployment model, including hardware, software, licensing, and third-party dependencies;
- supported standards, profiles, object models, and security suites;
- simulated DLMS smart meter capability, including maximum number of concurrent simulated meters, supported meter templates, configurability of COSEM objects, support for adding and removing functionality, support for IDIS 3 and AC Electricity Smart Meter prepayment objects, and support for applicable GCP use cases and security suites;
- support for testing of both simulated and real smart meters;
- support for integration and testing of third-party DLMS client systems, including HES and/or MDMS platforms;
- support for integration and testing of PLC data concentrators or gateways;
- approach to end-to-end AMI testing using combinations of HES/MDMS, simulated meters, real meters, and PLC gateways;
- approach to testing digital wallet-based prepayment functionality, including supported scenarios and validation methods;
- test automation, monitoring, protocol trace capture, and reporting capability;
- performance limits, scalability, and indicative sizing considerations;
- cybersecurity, access control, key management, and audit logging capability;
- training, documentation, maintenance, and technical support arrangements;

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- p) indicative implementation approach and timeframes;
- q) reference installations or comparable deployments; and
- r) indicative commercial model, including licence structure and recurring costs, where applicable.

PART B RESPONSE SHEET IN TERMS OF A REQUEST FOR INFORMATION To be completed by the supplier			
To	Eskom Holdings SOC Ltd	Date	15 April 2026
Attention	Letsibogo Mahlatji		
Tel no		Fax no and /or e- mail address	
From		Address	
Address			
Sender			
Description of the works /goods/services	AMI test bed solutions, services, platforms, or integrated laboratory environments that can support evaluation of AMI components and use cases relevant to Eskom's smart meter rollout.		

Please find below our response to Eskom's questions:

No.	Question	Please indicate your response in this column
1.	Name of the Respondent	
2.	The name and contact details of the person appointed by the Respondent as its representative in the event that Eskom needs to contact the company for clarification or further details.	
3.	Company profile and description of key service offerings and capacities.	
4.	Is the respondent/company an existing registered Eskom vendor? (Please provide vendor registration details)	
5.	Provide details on respondent/Company empowerment, localisation credentials (Black Youth & Women Owned Enterprise, BBBEE Enterprise etc.)	

Yours faithfully

Name	Designation	Signature	Date
Telephone number		Fax and/or e-mail address	

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