

Terms of Reference

INDEPENDENT VERIFICATION AGENT UNDER THE ELECTRICITY ACCESS SCALE-UP PROJECT (EASP) – VERIFICATION FOR UEDCL AND OTHER SERVICE PROVIDERS

1. Introduction

The Government of Uganda (GoU) has received funding from the World Bank towards the implementation of the Electricity Access Scale-Up Project (EASP).

The EASP aims to increase access to electricity in all areas of Uganda through, among others, supporting attainment of Government's access goals in a timely manner thereby contributing towards achievement of Government's development goals outlined in the Electricity Connections Policy (ECP), Third National Development Plan NDPII and Uganda's Vision 2040. The EASP will finance at least 1 million grid connections in rural, peri-urban and urban areas.

The funding under the EASP project will go towards implementing infrastructure and connections under the Electricity Connections Policy (ECP) and will be implemented on an Investment Project Finance (IPF) approach which Government continues to implement through the Ministry of Energy and Mineral Development (MEMD). Through the EASP, Government will provide funding for connections by procuring connection materials and providing them to utility companies outside the Umeme footprint to implement connections. MEMD is hiring a Materials Logistics Service Provider (MLSP) who as part of their role will be to issue connection materials to Service Providers.

The EASP facility intends to apply part of the proceeds towards consultancy services for independent verification of electricity connections. Therefore, MEMD wishes to procure the services of a competent and reputable company which will be contracted as an Independent Verification Agent (IVA) to verify the delivery of connections against which a subsidy will be disbursed.

2. OBJECTIVES OF THE ASSIGNMENT

- a) Verify that the eligible premises' connections, as detailed in the ECP Implementation Manual and or EASP Project Operations Manual (POM), have been physically installed in accordance with approved technical standards, are working, and have been properly documented.
- b) Verify that the eligible premise connections and ready board installations have been installed using connection materials provided by the MEMD.
- c) Reconcile materials issued by the MLSP to receipts by each participating SP.
- d) Conduct stock-taking of materials held in comparison to connections made and materials received from the MLSP and ensure completeness.

- e) Ensure that any missing or damaged materials are properly documented and the reports are signed off to be recovered from the SP
- f) Recommend to MEMD and financiers the reimbursement of appropriate costs to SPs.

3. ELECTRICITY CONNECTION IMPLEMENTATION AND ELIGIBILITY CRITERIA

3.1 Implementation Approach

The Government of Uganda through the MEMD will procure connection materials and provide them to the SPs operating in areas outside the Umeme footprint. MEMD will provide materials to make No Pole and Pole service connections. In addition, MEMD will provide ready boards for the SPs to install in premises that may not afford the conventional house wiring. Ready boards will be installed in line with the ERA prevailing guidelines.

The SPs will make connections and install ready boards and get refunded the transport and labour costs as approved by the ERA. The connections made including the ready boards will be verified by an Independent Verification Agent (IVA). Once they are deemed eligible, the SP will be refunded labour and transport costs as per the prevailing rates provided by ERA.

MEMD is procuring a Materials Logistics Service Provider (MLSP) who will provide logistics services including material issuance to SPs.

3.2 Eligibility Criteria

a) Connection eligibility

Eligibility criteria will be as follows for low voltage Single Phase customers - no pole and one-pole service connections:

- (i) Premise is located within the Licensed Area of the Service Provider.
- (ii) The owner of the premise has applied for and can be serviced by a no-pole or a one-pole service connection from the nearest distribution line.
- (iii) Premise has completed internal wiring at the time of application for a connection or a ready-board has been installed.
- (iv) Premise has paid the cost of inspection.

b) Ready board eligibility

The eligibility criteria for a ready board installation on customer premises shall be;

- i) Premises is located within Licensed Area of Service Providers
- ii) Customer has either a one or two-roomed structure (household or commercial premises)
- iii) Customer has applied for a ready board installation.

The prevailing approved guidelines by ERA on ready board installation and use shall apply.

4. SCOPE OF SERVICE

The IVA shall verify completed service connections implemented by Service Providers using connection materials procured by the MEMD. The IVA will be required to complete a desk-based verification of all eligible connections installed by Service Providers in their footprint and to physically inspect and verify at least 10% of the connections in each batch submitted.

The IVA will be provided with a list of connections made (on conventionally wired premises or where a ready board had been installed) together with supporting documentation. The IVA will be requested to perform verification of these connections.

Service Providers shall provide detailed information to MEMD about the connections made and ready boards installed. The IVA will verify Service Providers' claims and report to MEMD who will scrutinize the findings. The IVA will verify Service Providers' claims and report to MEMD who will scrutinize the findings. The IVA will ensure that there is no duplication of connections to be reimbursed. In doing this, the IVA will carry out a duplication test across the electricity connections master database.¹ The IVA will maintain an up-to-date database for all the connections verified and will submit this to MEMD at the end of each quarter as part of quarterly reporting.

It is expected that at least 410,000 connections (including ready board connections) implemented countrywide shall be verified and the IVA shall be required to carry out the following activities based on data supplied by Service Providers– electronic and or physical:

The IVA will also verify the connections' unique identifiers which will include among others barcode / serial numbers of the meters, ready boards, poles, cables, circuit breakers including GPS location coordinates.

The IVA will also verify connections in line with the EASP spelt out connection targets in line with the EASP Results Framework.

The IVA will provide training in the area of auditing and or monitoring or inventory management for five people.

The IVA shall perform the following tasks:

a) Task 1: Desk-Based Verification

Desk-based verification of all (100%) connections and ready board installations made using RBF:

¹ The IVA will be granted access to the master connections database.

- (i) Customer identification number in the Service Provider's database
- (ii) Name of the customer
- (iii) Meter number, type and serial number
- (iv) Manufacturer of the energy meter.
- (v) Metering type used for the customer (wired/wireless/PLC or other-specify type)
- (vi) Telephone contact of customer
- (vii) Date of first entry of customer in the Service Provider's database or application date
- (viii) Date of installation of connection
- (ix) Ready board serial number and type
- (x) Date of installation of ready board
- (xi) Location of connection shall include political district, sub-county, parish and village
- (xii) Customer demographic data including gender, main purpose for utilisation of electricity.
- (xiii) GPS coordinates of premise and or pole positions. This will also be validated and confirmed by the IVA. A GPS plot shall be generated by the IVA per batch of connections verified.
- (xiv) Connections from refugee host districts or non-refugee host districts.
- (xv) Type of connection (pole or no pole, one-phase household/commercial enterprise/public institution connection with: (a) pre-paid meter; (b) post-paid meter; (c) LV Single Phase ready-board connection with a pre-paid meter for the eligible premises structure (household or commercial premises).
- (xvi) Wiring Certificate available and in addition a Certificate of Compliance (CoC), where ready boards are installed.
- (xvii) Inspection Certificate available (either for a conventionally wired premises or where a ready board had been installed)
- (xviii) Network configuration (bare conductor/ ABC) where a pole service connection has been made.
- (xix) Generate and verify the barcode / serial numbers / unique identifiers for meters, poles and ready boards used under the EASP. The pole type and pole suppliers' data must also be verified.

b) Task 2: Physical Verification

Physical inspection shall cover 10% of the connections in each batch. This will be a random sample picked by the IVA. The methodology used for picking the sample shall be detailed in the report. This inspection shall be evenly distributed and not just restricted to non-remote areas.

The IVA shall prepare a random sample ensuring route optimisation and balance between rural, urban and peri urban areas and travel to the location where the connections have been installed and physically verify their existence, functionality, integrity and compliance to technical specifications. At the site of the installation, the IVA will obtain the following information pertaining to the connection by physically examining the installation and interviewing the customers:

- (i) Customer identification number in Service Provider's database

- (ii) Name of customer
- (iii) Meter number, type and serial number
- (iv) Telephone contact of customer
- (v) Date of installation of connection
- (vi) Ready board serial number and type
- (vii) Date of installation of ready board (where applicable)
- (viii) Location of connection shall include political district, sub-county, parish and village
- (ix) GPS coordinates of the premise at the customer service point/ point of supply to the premises. Will include both GPS coordinates for meters and poles.
- (x) Type of connection (no pole, one-phase household/commercial enterprise/public institution connection with a pre-paid meter, post-paid meter or metered ready-board)
- (xi) Metering type used for the customer (wired/wireless/PLC or other-specify type)
- (xii) Network configuration (bare conductor/ ABC) where a pole service connection has been made
- (xiii) Premise has completed internal wiring at the time of application for a standard metered connection, or it had applied for a ready-board connection
- (xiv) Connection is in compliance with the ECP Implementation Manual regarding technical Specification for the specific type of connection and eligibility criteria for a ready board installation.
- (xv) Check where the customer received information about the opportunity to connect under the ECP program (consultant, distribution company, radio, friends, service provider other – specify source)
- (xvi) Check if the customer was given an explanation of the ECP program (in case the explanation was not given, the IVA will give a short description of the ECP programme).
- (xvii) Check if the customer has paid any money for the connection or ready board installation and how much (note: amount paid)
- (xviii) Check if the connection installation is safe for the customer.
- (xix) Generate and verify the barcode / serial numbers / unique identifiers for meters, poles and ready boards used under the EASP. The pole type and pole suppliers' data must also be verified.
- (xx) Confirm the name of the manufacturer on the labels for meters, cable and circuit breakers.
- (xxi) Check and establish actual installation of new meter, ready board, earthing CB box and length of service cable in line with ERA requirements.

c) Task 3: Inventory Verification

Carry out physical and records verification of the stores and review stock records maintained by the SP following submission of reports by SPs. This will include the following activities:

- i) Visit the premises of the SP and inspect the conditions of the stores.
- ii) Carry out physical inventory count of connection materials possessed by the SP.
- iii) Reconcile materials received by the SPs against records of materials issuance held by MLSP.
- iv) Reconcile materials utilized by the SP with connections made.

- v) Review the records of delivery and issue out of stores and compare these to the number of connections made during the quarter and carry out reconciliation of the available materials stock in comparison to that used for specific eligible connections.
- vi) Examine the condition of the materials to ensure that any damaged materials and any slow-moving or obsolete items are being identified and accounted for accordingly (NB. Any damaged materials are recoverable in value from the SP)
- vii) Assess the adequacy of store management, including storage facility, security, and record keeping.

In conducting the above, the consultant shall seek to establish among others that there is no double counting of connections made with funding outside the EASP.

The IVA will be required to verify resolution actions undertaken by the Service Providers in line with recommendations made after the verification process during contract implementation. The IVA shall provide a summary report on the activity accordingly.

5. DURATION OF THE ASSIGNMENT

The IVA will carry out the verification services for a period of two (2) years.

6. GENERAL EXPERIENCE OF THE FIRM

The assignment is open to companies or consortia that have at least ten (10) years general experience in verification/audit and monitoring RBF programs, as well as management of large databases. The companies or consortia should have completed at least three (03) similar assignments involving independent verification or auditing RBF initiatives completed in the last ten (10) years. Documentary evidence for the assignments should be in form of completion certificates.

The companies should have an annual turnover of US\$3million and above per year. Audited accounts for the last three years showing revenues should be provided.

The IVA should have the expertise in developing surveys, sampling, collecting, compiling and analysing data.

They should have experience working with communities of different diversities in sub-Saharan Africa.

a) Key Personnel

The Consultant should have the following key personnel:

- **Team Leader** with a master's degree in Business Administration or related degree in business management and with more than 10 years post graduate working experience out of which 5 years should be in similar verification and leading teams. The expert should have a Professional accounting course like ACCA, CPA(U) or CPA(K). They should be a member of a Professional Accounting body like ACCA or CPA(U), CPA(K). They

should have a minimum of two assignments in audit related work and monitoring on similar assignments.

- **Financial Analyst/Auditor** with a Bachelor’s degree in Finance, Commerce, Business, Audit, . The expert should have a Professional accounting course like ACCA, CPA(U) or CPA(K). They should have 10 years’ experience in auditing similar assignments. They should have a minimum of two assignments in audit related work and monitoring on similar assignments.
- **Electrical Engineer** with a BSc Electrical Engineering or equivalent and 10 (Ten) years’ experience in power distribution.
- **Database Specialist** with a Bachelor’s degree in Information Technology, Computer Science, Business Computing or statistics with at least five (5) years of experience in management of large databases and GIS based systems.
- **Inventory Specialist with a** Bachelor’s degree in Inventory Management, Finance of Business and 7 (seven) year’s experience in inventory management.

b) Person Months

No.	Key Expert	Person Months
1	Team Leader	10
2	Electrical Engineer	12
3	Finance Analyst/Auditor	8
4	Database Specialist	8
5	Inventory Management Specialist	8
	Total Person Months	46

7. DELIVERABLES

i. Inception Report: The IVA shall submit an Inception Report detailing the methodology and approach to be applied in the verification of connections and inventory. This will

include sampling methodology/criteria to be applied for determination of 10% of connections that will be subjected to physical verification, check-list of supporting information/data to be provided by Service Providers for each connection batch requiring verification, draft questionnaires and draft pro forma verification reports, etc.

ii. Connections or ready board installations Reports (Task 1 -2): The IVA shall submit Verification Reports containing information as detailed above on each batch of connections or ready board installations. The Reports will list all customers connected and or ready boards installed (Task 1), those physically verified (Task 2) and inventory management (Task 3). The reports will confirm the number of eligible connections or ready board installations verified for subsidy payment by connection type (ready board or conventional wiring).

iii. Progress Reports: The IVA will provide quarterly reports indicating the number of connections verified in a quarter and the cumulative connections, inventory status, connection target in line with the EASP Results Framework challenges and proposed solutions to challenges.

iv. Project completion report: The IVA shall issue a project completion report that will highlight the full project implementation, challenges encountered, lessons learnt and possible areas of improvement in future projects.

8. TIMELINE OF DELIVERABLES

The IVA will carry out the assignment under the supervision of the Connections Manager under the EASP Project Implementation Unit.

The IVA shall submit for each required report, four hard copies and one soft copy on CD ROM to MEMD in accordance with the following timelines.

Report	Timing
Inception Report acceptable to the client	Within the first three weeks of effectiveness of contract
Draft Connections Verification Reports acceptable to the client	Within 30 calendar days after receiving the list of connections from the MEMD and the associated documentation from Service Providers.

Final Connections Verification Reports acceptable to the client	Within 5 working days after receiving comments on the draft verification reports from the MEMD and respective stakeholders. ²
Quarterly Progress Reports acceptable to the client	Within 10 calendar days after the end of the quarter.
Completion Report acceptable to the client	30 calendar days from the time of project/contract closure.

9. SERVICES, FACILITIES AND RESOURCES TO BE PROVIDED BY MEMD

- (i) Provide up-to-date service territory maps, key information/data on the grid extension lines and grid intensification schemes, etc.
- (ii) Provide the ECP Implementation Manual and the EASP POM.
- (iii) Provide contacts of Service Providers and any additional information that is essential for the implementation of the assignment.
- (iv) Assign a Contract Management Team under the leadership of the Connections Manager, EASP PIU which will handle day to day coordination matters relating to the assignment.
- (v) Provide letters of introduction to Service Providers, Local Authorities and other relevant offices as need may arise.
- (vi) Access to the master connections database.

10. SERVICES, FACILITIES AND RESOURCES TO BE PROVIDED BY THE IVA

- (i) Employ well qualified and competent professional staff at all times in the execution of the services.
- (ii) Facilitate the IVA's staff. This shall include office and living accommodation, equipment, transport, telecommunications, office and other supplies etc.
- (iii) Ensure that the Team Leader and Experts have the full authority to make decisions necessary to complete the services as required.

11. CROSS-CUTTING ISSUES

The IVA shall ensure implementation of the health, Safety and Gender considerations during the implementation of the consultancy services. These shall be among others:

- (i) Ensure provision of Personal Protective Equipment (PPE) to the workers
- (ii) Sensitization of workers on the HSE aspects in relation to the implementation of the assignment.

Collect and report on gender disaggregated data during verification of the connections made.

² MEMD shall provide comments within 5 working days after receiving the draft verification reports.

