ACCOUNTANT GENERAL'S DEPARTMENT

REQUEST FOR EXPRESSION OF INTEREST
(CONSULTING SERVICES - FIRM SELECTION)

SHORTLISTING SELECTION- FIRM

Name of Country	***:***	***MALAWI***
Name of Project	***:***	***PROGRAM FOR RESULTS (PforR)***
Assignment Title	***:***	***ELECTRONICALLY TAG PUBLIC ASSETS, DEVELOP AN ANDROID MOBILE ASSET VERIFICATION APPLICATION AND INTEGRATE THE ASSET TAGGING SYSTEM WITH SAP-IFMIS FOR PROPER ASSET TRACKING AND REPORTING***
Consultancy Ref. No	***:***	***AGD/ETAG/26-27/06***
Date of Issue	***:***	***26th November, 2026***
Date of Submission	***:***	***03rd November, 2026; 10:00 Hour Local Time***

1) Introduction

The Government of Malawi, through the Accountant General Department has financial resources in the 2026- 2027 Fiscal Year and intends to apply part of the funds towards payment for procurement consultancy **services for electronically public asset tagging, development of an android mobile asset verification application and integration of asset tagging system with SAP- IFMIS for proper asset tracking and reporting in all MDAs.**

The Government of Malawi has a wide range of assets including, among others, land, buildings, furniture, computers, plant and machinery, and other movable and immovable assets. These assets are located in various Ministries, Departments and Agencies (MDAs). Over the years, there has not been proper recording and reporting of these assets.

The Public Finance Management Act (2022), Section 12 subsection 1 (d) and (e), gives responsibility to the Accountant General to prescribe standards for asset management and

safe custody of such assets and related documents, and to prescribe, maintain and monitor registers of all property, assets and investments of the Government.

One of the tools that may be adopted to improve management of public assets is the introduction of electronic tags on public assets. In pursuit of this legal mandate, the Office of the Accountant General wishes to embark on an asset tagging exercise, where all Government movable assets will be verified and tagged in order to update the Fixed Assets database in SAP-IFMIS for timely recording and reporting purposes.

Instead of procuring dedicated hand-held barcode readers, the Accountant General's Department (AGD) intends to use a **custom-developed Android mobile application** that turns Government-issued Android smartphones and tablets into tag scanning and asset verification devices. The mobile application will be integrated with a central web-based Asset Tagging System, which in turn will be **integrated with SAP-IFMIS** so that every tag carries, and is linked to, the official SAP asset number.

2) Background

During routine physical verification exercises spearheaded by the Accountant General's Department as custodian of asset management, it transpired that most MDAs do not tag their assets. Assets may either be tagged manually or electronically. However, best asset management practices recommend the electronic tagging of assets. Electronic tagging of assets provides an environment that easily identifies and tracks the movement of all public assets between locations.

The absence of electronic tagging exposes public assets to inherent risks of loss by way of theft, collusion, fraud and misappropriation. In addition, asset records held in SAP-IFMIS are not routinely reconciled with the physical existence, condition and location of the assets, which weakens the reliability of financial reporting.

The Accountant General's Department is aware that electronic tagging of public assets requires a significant capital outlay which most MDAs may not be in a sound financial position to finance. Using an Android mobile application on commonly available devices, rather than proprietary hand-held scanners, is expected to reduce hardware costs, simplify roll-out to MDAs and make the solution easier to sustain.

3) Objectives of the Assignment

The key objectives of this assignment are:

i. To identify public assets, since the main function of any asset tag is to serve as an identifier or marker of an asset.
ii. To secure public assets against theft and misappropriation. Tags also help to trace assets that are frequently moved around facilities and locations back to their primary location.
iii. To improve asset management and bring the financial statements, records and reporting up to date.
iv. To develop a comprehensive inventory of all Government assets in the SAP-IFMIS Asset Accounting (Fixed Assets) module, with each physical asset linked to its SAP asset number.
v. To provide a basis for valuation of all obsolete assets that are due for disposal.
vi. To provide a proper asset tracking system to facilitate proper asset utilisation, management and monitoring.
vii. To develop an Android mobile application that enables Government officers to scan tags, verify assets, capture asset condition, location and photographs, and record asset movements in the field, including in areas with poor network connectivity.
viii. To integrate the Asset Tagging System with SAP-IFMIS so that asset numbers and master data are fetched automatically from SAP-IFMIS, eliminating manual re-keying and duplicate numbering.

4) Scope of the Assignment

Tagging of Government assets will cover all movable assets, including office furniture and equipment, computers and ICT equipment, motor vehicles, plant and machinery. The assignment will initially cover three (3) pilot Ministries, with the solution designed to scale to all MDAs.

The scope of the assignment comprises the following components:

i. **Electronic asset tags** – supply of durable tags encoded with the SAP-IFMIS asset number (barcode and QR code; RFID/NFC as a priced option).
ii. **Android mobile application** – design, development, testing, deployment and support of a mobile application for tag scanning, asset verification, tagging and movement tracking.
iii. **Web-based Asset Tagging System** – central back-end system, database and web portal for asset management, workflow, dashboards and reporting.
iv. **SAP-IFMIS integration** – secure, two-way integration that fetches asset numbers and asset master data from SAP-IFMIS and, subject to approval, posts verification results back.
v. **Baseline verification and tagging** – supervising the physical verification and tagging of assets in the pilot Ministries and reconciling them to SAP-IFMIS.
vi. **Training, skills transfer, documentation and post-implementation support.**

5) Consultant Specific Tasks

The Consultant will undertake the following tasks:

5.1 Provision of Electronic Asset Tags

i. Provide readable electronic tags according to the specifications in Section 7.

ii. Print on each tag the SAP-IFMIS asset number (and sub-number where applicable) fetched through the integration, in both human-readable and machine-readable (barcode and QR code) form.

iii. Provide tags within the prescribed delivery period.

iv. Orient responsible Government of Malawi (GoM) staff on how to affix asset tags.

v. Supervise GoM staff on the procedures of affixing tags to assets.

5.2 Development of an Android Mobile Application

This task replaces the provision of barcode / QR code readers and hand-held scanners. The Consultant shall:

i. Gather and document detailed user requirements for the mobile application through workshops with AGD, the pilot Ministries and the IFMIS team.

ii. Design the user interface and user experience (UI/UX) and present wireframes / prototypes for approval before development.

iii. Develop a native Android application (Kotlin or Java) or an approved cross-platform equivalent that meets the functional and technical requirements in Section 9.

iv. Enable scanning of barcodes and QR codes using the device camera, and support external Bluetooth scanners and NFC/RFID readers where these are used.

v. Integrate the mobile application with the Asset Tagging System through secure, documented REST APIs.

vi. Provide offline capability so that verification can be done in locations without network coverage and synchronised automatically once connectivity is restored.

vii. Test the application on a range of devices and Android versions agreed with the Client, and deploy it through a managed channel (Mobile Device Management or a private/managed Google Play distribution).

viii. Recommend minimum Android device specifications (see Section 9.4) and, where priced in the financial proposal, supply the agreed number of devices.

ix. Hand over the complete, documented source code, build scripts and signing keys to the Government.

5.3 Asset Tagging System Development and Implementation

i. Design, develop / configure and implement a web-based Asset Tagging System (back-end, database, web portal and APIs) meeting the requirements in Section 8.

ii. Deploy the system in the Government data centre or Government-approved hosting environment, in production, test and training environments.

iii. Manage hardware and infrastructure upgrades required for the electronic tagging of assets.

iv. Configure user roles, approval workflows, organisational structure (MDAs, departments, cost centres) and locations.

5.4 Integration with SAP-IFMIS

i. Analyse the SAP-IFMIS Asset Accounting configuration (company codes, asset classes, numbering ranges, cost centres, plants and locations) together with the IFMIS team.

ii. Design and document the integration architecture, interface specifications and data mapping, for approval by AGD and the IFMIS technical team.

iii. Develop and configure the interfaces to fetch the SAP asset number and asset master data from SAP-IFMIS and link them to tags, as detailed in Section 10.

iv. Develop, subject to approval, interfaces to post physical verification results (e.g. last inventory date, inventory note, location / room, condition) back to SAP-IFMIS.

v. Provide reconciliation and exception reports between SAP-IFMIS records and physically verified assets.

vi. Work with the IFMIS team and the Government's SAP support partner on SAP-side configuration, authorisations and transports.

5.5 Baseline Verification, Data Migration and Tagging

i. Extract the asset register of the pilot Ministries from SAP-IFMIS and load it into the Asset Tagging System.

ii. Support GoM teams, using the mobile application, to physically verify assets against the SAP-IFMIS register and tag them.

iii. Record assets found but not in SAP-IFMIS, and assets in SAP-IFMIS but not found, and route them through the approved workflow for capitalisation, transfer or write-off.

iv. Produce a verified and reconciled asset register for each pilot Ministry.

5.6 Training of Trainers (ToT) and User Training

i. Prepare a Training Needs Assessment and a detailed training plan, schedule and materials for approval by AGD before any training starts.

ii. Conduct Training of Trainers (ToT) for a core group of Government officers nominated by AGD (asset management officers, accountants, ICT and IFMIS staff) so that they can train other officers in all MDAs without the Consultant.

iii. Equip the ToT participants with a complete trainer's toolkit: trainer guides, presentation slides, hands-on exercises, a training environment with sample data, and assessment tools.

iv. Co-facilitate the first round of end-user training with the trained trainers, and observe and coach them to the point where they can deliver the training independently.

v. Conduct end-user training for asset custodians, verification teams, approvers and system administrators in the pilot Ministries.

vi. Evaluate each training session (participant feedback and competency tests) and submit training reports with attendance registers.

5.7 Orientation on the System

i. Conduct orientation sessions on the Asset Tagging System, the Android mobile application and the SAP-IFMIS interface for AGD management, Controlling Officers, Heads of Finance and other key stakeholders in the pilot Ministries.

ii. Cover the purpose of the system, the end-to-end process (from SAP asset number to tag, verification, movement and reporting), roles and responsibilities, and the reports and dashboards available to management.

iii. Hold orientation sessions before go-live in each pilot Ministry, and provide short user guides and quick-reference cards for the mobile application.

5.8 Monitoring and Evaluation (M&E) of the System

i. Develop an M&E framework for the system, approved by AGD, with a results framework, key performance indicators (KPIs), baselines, targets, data sources, responsibilities and reporting frequency.

ii. Indicative KPIs shall include: percentage of assets verified and tagged; percentage of tagged assets matched to SAP-IFMIS asset numbers; number of unregistered and missing assets identified and resolved; number of mobile app users actively using the system; system and interface availability; synchronisation success rate between SAP-IFMIS and the Asset Tagging System; help desk tickets resolved within SLA; and user satisfaction.

iii. Build an M&E dashboard into the Asset Tagging System so that AGD can monitor these KPIs in real time.

iv. Submit monthly M&E progress reports during implementation and quarterly M&E reports during the support period.

v. Conduct a mid-term review and an end-of-project evaluation, including a user satisfaction survey, lessons learnt and recommendations for roll-out to other MDAs.

5.9 System Support

i. Co-manage the Asset Tagging System and mobile application with the Government support team during the support phase, progressively handing responsibilities over to the Government team.

ii. Perform quarterly system maintenance activities, including performance tuning, security patching, Android OS compatibility updates and application updates.

iii. Provide help desk support with defined service level agreements (SLAs) for issue resolution (see Section 13).

iv. Implement a Disaster Recovery (DR) and Business Continuity Management Plan (BCMP).

5.10 System Handover and Knowledge Transfer to AGD

The overall aim is that, at the end of the assignment, AGD and its ICT team are able to operate, maintain, support, modify and further develop the system without any help from the Consultant. The Consultant shall:

i. Prepare a Knowledge Transfer and Handover Plan within the inception phase, naming the Government counterparts for each area (system administration, database, mobile app, APIs, SAP interfaces, infrastructure and help desk).

ii. Work side by side with the Government counterparts throughout the assignment ("shadowing"), with Government staff progressively taking over tasks ("reverse shadowing") under the Consultant's supervision.

iii. Deliver technical training for the AGD ICT team on: system architecture; database administration; installing, configuring and upgrading the system; building, signing and publishing the Android app; managing the APIs and the SAP-IFMIS interfaces; backups and disaster recovery; and troubleshooting.

iv. Hand over all administrator accounts, passwords, certificates, app signing keys, licences and configuration settings, so that the Government has full control of the system.

v. Hand over complete documentation: system administration manual, technical / architecture documents, database design, API and interface specifications, installation and deployment guides, operations runbook, SOPs and user manuals.

vi. Demonstrate, before formal handover, that the Government team can independently carry out key tasks (e.g. deploy a new release of the app, restore from backup, resolve an interface failure).

vii. Sign a formal Handover Certificate with AGD once all of the above has been completed and accepted.

5.11 Provision of Source Code to the Government ICT Team

i. Provide the complete and current source code of all custom-developed components – the Android mobile application, web system, APIs, SAP-IFMIS interfaces (including any SAP-side developments), database scripts and reports – to the AGD ICT team.

ii. Store the source code in a Government-controlled code repository (e.g. Git) from the start of development, with full version history, so that the ICT team has continuous access and not only at the end of the project.

iii. Provide the build scripts, third-party library lists (with licences), configuration files, deployment scripts and app signing keys needed to build and deploy the system from source.

iv. Walk the ICT team through the source code in code walk-through sessions, and demonstrate that the ICT team can build the system from the handed-over source code and deploy it to the test environment.

v. Hand over updated source code with every release during the support period.

vi. The source code, documentation and intellectual property of all custom developments shall belong to the Government of Malawi.

5.12 Engagement with the Department of E-Government

i. Engage the Department of E-Government for technical advice and guidance throughout the assignment.

ii. Submit the solution architecture, hosting design, security design and mobile application design to the Department of E-Government for review and advice before development.

iii. Comply with Government ICT policies, standards and guidelines issued by the Department of E-Government, including those on hosting, cyber security, data protection and interoperability.

iv. Involve the Department of E-Government in security testing, UAT and the system handover.

6) Deliverables

The following are the expected deliverables from this assignment:

#	Deliverable	Description / acceptance evidence	Indicative timing
1	Inception report	Detailed work plan, methodology, risk register and confirmed requirements	Month 1
2	Requirements & design documents	Business requirements, solution architecture, UI/UX prototypes of the mobile app, SAP integration design and data mapping	Month 2
3	Electronic asset tags	Tags printed with SAP asset numbers, delivered and accepted against the specifications	Months 2–3
4	Android mobile application	Tested and signed application (APK/AAB) deployed through MDM / managed Play; UAT sign-off	Month 4
5	Web-based Asset Tagging System	Installed production, test and training environments; UAT sign-off	Month 4
6	SAP-IFMIS interface	Working, tested interfaces (asset number fetch and verification write-back); integration test report signed by IFMIS team	Month 4
7	Verified and tagged asset register	Reconciled register for each pilot Ministry with exception reports	Months 4–5
8	M&E framework	Approved M&E framework with KPIs, baselines and targets; M&E dashboard in the system	Month 2
9	Training of Trainers (ToT)	ToT delivered; trainer toolkit handed over; ToT reports and competency assessments	Months 4–5
10	Orientation and user training	Orientation sessions for management and stakeholders; end-user training reports and attendance registers; user manuals and SOPs	Months 3–5
11	Source code	Complete source code in a Government-controlled repository, build scripts and signing keys; ICT team successfully builds and deploys from source	From Month 2; final at Month 5 and each release
12	System support and user handholding	Monthly support reports against SLAs; quarterly maintenance reports	Month 6
13	M&E reports	Monthly M&E reports (implementation),	Months 2–6

#	Deliverable	Description / acceptance evidence	Indicative timing
		quarterly M&E reports (support), mid-term review and end-of-project evaluation	
14	System handover to AGD	Knowledge transfer completed; all accounts, keys, licences and documentation handed over; signed Handover Certificate	Month 6
15	Project completion report	Final report, lessons learnt and roll-out recommendations for other MDAs	Month 6

7) Specification for the Asset Tag

i. Resistant to UV light and other chemicals.
ii. Heat resistant.
iii. Resistant to abrasion and tamper-evident (tag is destroyed or shows "VOID" if removed).
iv. Coded with both human-readable and machine-readable information.
v. Clearly visible.
vi. High-bond adhesive that fuses permanently to most surfaces including wood, metal and plastic.
vii. Conformable (can be bent) for curved surfaces.
viii. Available in full colour print, including the Government Coat of Arms and MDA name.
ix. Matte or gloss surface.
x. Warranty of at least three (3) years before the tags/marks fade.
xi. Anodised aluminium (or equivalent durable material) for metal and outdoor assets.
xii. Encoded with the **SAP-IFMIS asset number** (company code, main asset number and sub-number) in both barcode (Code 128) and QR code format, readable by the camera of the Android devices specified in Section 9.4.
xiii. Optional (priced separately): NFC (ISO 14443 / NTAG) or UHF RFID tags, including on-metal variants, for high-value or high-risk assets.

8) Asset Tagging System (Web) Requirements

i. Capture and store all asset tags, each linked to a unique SAP-IFMIS asset number.
ii. Supply and implement online tracking of asset movement between locations, including automated asset movement requests, approvals, electronic gate passes and receipt confirmation.
iii. Store all asset information in a secure relational database.
iv. Track assets by physical location (GPS and room), employee assigned, tag number, SAP asset number, asset description, asset class, MDA/department, cost centre, make, model and serial number.
v. Import and export data using an import/export wizard into Excel or other data manipulation tools.

vi. Instantly view assets assigned to any department, employee, or with a particular status, with automatic tracking of changes in status and location.

vii. Manage physical verification campaigns: create verification exercises, assign them to teams and mobile users, and monitor progress in real time.

viii. Provide dashboards and standard, ad hoc and customised reports, including verification coverage, missing assets, unregistered assets, condition analysis and SAP-IFMIS reconciliation.

ix. Provide role-based access control, approval workflows and a full audit trail of all transactions.

x. Expose secure, versioned REST APIs for the mobile application and for integration with SAP-IFMIS and other Government systems.

xi. Provide a mobile device and user management console (register devices, disable lost devices, view sync status).

9) Android Mobile Application Requirements

The Android mobile a application replaces the hand-held barcode scanners previously specified. It shall meet the following minimum requirements.

9.1 Functional Requirements

i. **Secure login** using Government user credentials (single sign-on / Active Directory or the Asset Tagging System accounts), with optional PIN or biometric unlock.

ii. **Tag scanning** of barcodes (Code 128, Code 39) and QR codes using the device camera, with auto-focus and flash support, plus NFC tag reading on NFC-enabled devices and support for Bluetooth scanners.

iii. **Asset look-up**: on scanning a tag, display the asset details fetched from SAP-IFMIS via the Asset Tagging System (asset number, description, class, cost centre, location, custodian, capitalisation date, serial number).

iv. **New tagging**: search for an untagged asset by SAP asset number, serial number or description, then link a new tag to it by scanning.

v. **Physical verification**: confirm existence, record condition (e.g. good, fair, poor, obsolete, unserviceable), take photographs, capture GPS coordinates and room/location, and add remarks.

vi. **Exceptions**: record assets found that are not in SAP-IFMIS (with photo and details) and flag assets not found, for workflow processing.

vii. **Asset movement**: initiate and approve transfer requests, generate and validate electronic gate passes, and confirm receipt at the destination.

viii. **Verification campaigns**: download assigned verification lists by MDA, location or cost centre and show progress (verified / pending / exceptions).

ix. **Offline mode**: perform all scanning and verification without network connectivity, store data in an encrypted local database and synchronise automatically, with conflict handling, when connectivity is restored.

x. **Notifications** for pending approvals, assigned tasks and sync errors.

xi. **Reports** on the device: summary of the day's verifications and exceptions.

xii. User interface in English, simple and usable by non-technical staff with minimal training.

9.2 Technical Requirements

i. Support Android 10 (API level 29) and above, and target the latest Android API level required by Google Play policy at the time of delivery.

ii. Communicate with the Asset Tagging System only through secure REST APIs over HTTPS (TLS 1.2 or higher) with token-based authentication (e.g. OAuth 2.0 / JWT); the app shall never connect directly to SAP-IFMIS.
iii. Encrypt data stored on the device; prevent screenshots of sensitive screens where required; support remote wipe of application data through MDM.
iv. Use certificate pinning and comply with OWASP Mobile Application Security (MASVS) guidelines; pass an independent security test before go-live.
v. Operate efficiently on mid-range devices, with scan-to-result time of less than two (2) seconds when online.
vi. Log user actions with user ID, device ID, date/time and GPS location for audit purposes.
vii. Support updates through MDM or managed Google Play without data loss.

9.3 Deployment and Device Management

i. Distribute the application through the Government's Mobile Device Management (MDM) solution or a private managed Google Play channel.
ii. Register each device against a user and MDA in the Asset Tagging System; allow lost or stolen devices to be blocked.
iii. Provide release notes and version control for every release.

9.4 Recommended Minimum Device Specifications

Where the Government or the Consultant procures devices, they shall meet at least the following specifications:

Item	Minimum specification
Operating system	Android 12 or later, with at least 3 years of security updates remaining
Processor / memory	Octa-core processor; 4 GB RAM; 64 GB storage
Camera	13 MP rear camera with auto-focus and flash
Connectivity	4G/LTE, Wi-Fi, Bluetooth 5.0, GPS; NFC (where NFC tags are used)
Battery	At least 4,000 mAh, sufficient for a full working day of scanning
Display	At least 5.5 inch touch screen readable outdoors
Ruggedness	Rugged case or rugged device (IP65 or better) recommended for field verification

10) SAP- IFMIS Integration Application Requirements

10.1 Integration Principles

i. SAP-IFMIS shall remain the system of record for asset numbers and financial asset data (acquisition value, depreciation, net book value). The Asset Tagging System shall not generate its own asset numbers for capitalised assets.

ii. All integration shall use SAP-standard, supported interfaces – OData services (SAP Gateway), RFC/BAPIs, IDocs or web services, routed through the Government's middleware (e.g. SAP PI/PO or SAP Integration Suite) where available. Direct reading of or writing to SAP database tables is not permitted.

iii. The integration design, SAP-side developments and authorisations shall be approved by the AGD IFMIS team before implementation, and transported through the Government's SAP landscape (development → quality → production).

iv. The mobile application shall not connect to SAP-IFMIS directly; all calls go through the Asset Tagging System.

10.2 Fetching the Asset Number and Master Data (SAP-IFMIS → Asset Tagging System)

i. Fetch the asset register for selected company codes / MDAs, including the asset number (main number and sub-number) and the master data listed in Section 10.4.

ii. Support an initial full load, followed by scheduled delta (incremental) synchronisation of new, changed, transferred and retired assets (at least daily, with on-demand refresh).

iii. Support real-time look-up of a single asset by SAP asset number, inventory number or serial number when a tag is being linked from the mobile application.

iv. When a new asset is capitalised in SAP-IFMIS, make it available in the Asset Tagging System for tagging, and generate the tag print file using the SAP asset number.

v. Prevent duplicate tagging: one SAP asset number may be linked to only one active tag, and vice versa.

10.3 Posting Verification Results (Asset Tagging System → SAP-IFMIS)

Subject to approval by AGD, and only after approval within the Asset Tagging System workflow, the integration shall update the following non-financial fields in the SAP-IFMIS asset master record:

i. Tag / inventory number (where the tag number differs from the asset number).

ii. Last physical inventory date and inventory note.

iii. Location and room; cost centre (for approved transfers).

iv. Asset condition and verification status (using an agreed SAP field or custom field).

Financial transactions (acquisition, transfer postings between company codes, retirement / write-off, revaluation) shall not be posted automatically. Instead, the Asset Tagging System shall produce approved exception lists and supporting evidence for the responsible SAP-IFMIS users to process in SAP.

10.4 Indicative Data Mapping

The following mapping is indicative and shall be confirmed during design against the SAP-IFMIS configuration (ATS = Asset Tagging System):

Asset Tagging System field	SAP-IFMIS field (indicative)	Direction
Company code / MDA	BUKRS	SAP → ATS
SAP asset number	ANLN1 (main number)	SAP → ATS
Asset sub-number	ANLN2	SAP → ATS
Asset class	ANLKL	SAP → ATS
Description	TXT50 / TXA50	SAP → ATS
Serial number	SERNR	SAP → ATS
Inventory / tag number	INVNR	Two-way
Capitalisation date	AKTIV	SAP → ATS
Cost centre	KOSTL	Two-way (approved transfers)
Plant / location / room	WERKS / STORT / RAUMN	Two-way
Last inventory date	IVDAT	ATS → SAP
Inventory note	INVZU	ATS → SAP
Acquisition value, net book value	Asset values (read only)	SAP → ATS
Deactivation (retirement) date	DEAKT	SAP → ATS

Indicative SAP standard objects include BAPI_FIXEDASSET_GETLIST, BAPI_FIXEDASSET_GETDETAIL and BAPI_FIXEDASSET_CHANGE, or equivalent OData services. The Consultant shall confirm the objects appropriate to the SAP-IFMIS release in use.

10.5 Integration Security, Monitoring and Reconciliation

i. Use a dedicated SAP technical (communication) user with least-privilege authorisations, approved by the IFMIS security administrator.

ii. Encrypt all data in transit (HTTPS/TLS or SAP SNC).

iii. Log every interface call and record (timestamp, user, records sent/received, success/failure); provide an interface monitoring dashboard, alerts and a re-processing facility for failed records.

iv. Provide daily reconciliation reports comparing record counts and key fields between SAP-IFMIS and the Asset Tagging System.

vi. Provide interface specifications, test scripts and an operations runbook to the IFMIS team.

11) Non Functional Requirements

i. **Hosting**: the solution shall be hosted in the Government data centre or a Government-approved environment, with separate development, test, training and production environments.

ii. **Security:** role-based access, strong password policy and/or SSO, encryption of data at rest and in transit, and an independent vulnerability assessment / penetration test of the web system, APIs and mobile app before go-live.

iii. **Data protection:** compliance with the Data Protection Act of Malawi and Government ICT policies and standards; all data shall remain the property of the Government of Malawi.

iv. **Availability and performance**: at least 99% availability during working hours; support at least 500 concurrent users and a register of not less than 1,000,000 assets without degradation.

v. **Scalability**: the design shall allow roll-out to all MDAs without re-development.

vi. **Audit trail**: all creations, changes, approvals, scans and interface transactions shall be logged and not editable.

vii. **Backup and recovery**: daily backups; Recovery Point Objective (RPO) of 24 hours and Recovery Time Objective (RTO) of 8 hours or better.

viii. **Ownership:** the Government shall own the source code, documentation and intellectual property of all custom developments, with no recurring licence fees for the custom components. Source code shall be provided as set out in Section 5.11. Any third-party licences shall be disclosed and priced in the financial proposal.

12) Testing and Acceptance

i. Unit and system testing by the Consultant, with test evidence.

ii. System Integration Testing (SIT) with SAP-IFMIS in the SAP quality environment, jointly with the IFMIS team.

iii. User Acceptance Testing (UAT) by AGD and pilot Ministry users, including field testing of the mobile application in low-connectivity locations.

iv. Independent security testing of the mobile application, web system and APIs, with the involvement of the Department of E-Government.

v. Pilot go-live in one Ministry, followed by roll-out to the remaining pilot Ministries.

vi. Each deliverable shall be accepted in writing by the Asset Tagging Task Force before payment.

13) Technical Support and Training

i. The Consultant shall conduct training during and after the implementation of the system to the satisfaction of the Client. Bidders must attach a clear training plan and schedule covering end users (mobile app), asset administrators (web system), ICT/IFMIS technical staff (APIs, SAP interfaces, mobile app source code) and trainers (ToT), in line with Sections 5.6 to 5.10.

ii. The Consultant shall propose support SLAs, including at minimum: critical issues (system or interface down) – response within 2 hours and resolution within 8 hours; high – response within 4 hours and resolution within 2 working days; medium/low – resolution within 5 working days.

iii. The Consultant shall keep the mobile application compatible with new Android versions released during the support period.

14) Past experience of the Firm

The firm must:

- Have been in the business of electronic asset tagging and/or support for a period of not less than two (2) years.
- Demonstrate at least one (1) completed Android (or cross-platform) mobile application deployed in a production environment, preferably for asset management, inventory or field data collection.
- Demonstrate at least one (1) completed integration with SAP (preferably SAP Asset Accounting / Fixed Assets), or partner with a firm that has such experience.

- Provide a list of related works performed, by way of LPO, contract award letter, completion certificate, etc.
- Provide a list of referees for the related works above.

15) Team Qualifications and Skills

The firm shall have staff who possess specific professional certification and experience in:

- Gathering business requirements and providing conceptual and detailed designs to meet business needs.
- Assessing existing IT infrastructure and recommending improvements.
- Developing and configuring customised asset tagging systems and solutions.
- Designing and developing secure Android mobile applications.
- Integrating systems with SAP (OData, RFC/BAPI, IDoc, SAP PI/PO or Integration Suite).
- Writing scripts and programs to create user-friendly interfaces and enhanced functionality.
- Troubleshooting and resolving issues to optimize performance.

16) Team Composition

i. Project Manager (Team Lead)
ii. ICT Consultant / Solution Architect
iii. Android Mobile Application Developer
iv. SAP Integration Consultant
v. Technical Consultant (Asset Management, Training and Support)

17) Key project Role

In addition to the technical consultants, the firm shall provide a Team Lead. The core competencies of each key role are as follows:

17.1 Team Lead (Project Manager)

Education

Bachelor's degree in Information Technology, Computer Science, Business Administration or a related discipline. A Master's degree or project management certification (e.g. PMP, PRINCE2) is an added advantage.

Experience

- At least two (2) completed projects as Team Leader or Project Manager.

- Experience in asset tagging system implementation is an added advantage.
- At least five (5) years' experience in implementing and supporting software applications, preferably in the public sector.

Technical and project management skills

- Experience in database, data migration and ERP (e.g. SAP) integration projects, and in coordinating technical teams.
- Sound knowledge of project management and the software development life cycle.

17.2 ICT Consultant / Solution Architect

Bachelor's degree in Information Technology, Computer Science or a related field, with at least three (3) years' experience in:

- Assessing IT infrastructure and designing solution architectures, databases and APIs.
- Developing asset tagging or similar asset management systems.
- Application security and hosting.

17.3 Android Mobile Application Developer

Bachelor's degree in Computer Science, Software Engineering or a related field, with at least three (3) years' experience in:

- Developing Android applications, with at least two (2) apps delivered to production.
- Barcode/QR scanning, GPS and camera integration.
- Offline data capture and synchronization, secure API integration and mobile security.

17.4 SAP Integration Consultant

Bachelor's degree in Information Technology, Computer Science, Accounting or a related field, with at least three (3) years' experience in:

- SAP Asset Accounting (FI-AA) master data and processes.
- Developing and supporting SAP interfaces (e.g. OData, RFC/BAPI, IDocs).
- SAP authorisation concepts and transport management.
- SAP certification and public sector SAP experience are an added advantage.

17.5 Technical Consultant (Asset Management, Training and Support)

Bachelor's degree in Information Technology, Computer Science, Accounting or a related discipline, with at least three (3) years' experience in asset management systems, user training and system support, and the following abilities:

- Knowledge of public sector asset management and IPSAS asset accounting requirements.
- Ability to supervise staff and to implement and maintain asset management solutions.
- Experience in designing and delivering Training of Trainers (ToT) and end-user training, and in monitoring and evaluation of systems.
- Good communication and interpersonal skills.

18) Reporting and Communication

i. The Consultant will report directly to the Accountant General through Asset Tagging Task Force, which will in turn brief the Project Management Team. The Task Force shall include representation from the AGD IFMIS team, the AGD ICT team and the Department of E-Government, which will provide technical advice.

ii. The Consultant shall submit monthly progress reports and report on every milestone, deliverable completion and at the end of the project implementation.

19) Mode of Implementation

The mode of implementation shall be on-site. Software development may be carried out partly off-site, subject to agreed progress reviews, but requirements gathering, integration testing with SAP-IFMIS, UAT, training and go-live shall be on-site.

20)Duration

Six (6) months, comprising approximately five (5) months of implementation and one (1) month of post-implementation support, renewable subject to satisfactory performance. The support period shall end with the formal system handover to AGD (Section 5.10).

21) Selection of the Firm

Expression of Interest (EoI) will be evaluated or selected in accordance with the Public Procurement and Disposal of Asset Act No 7 of 2025 and Public Procurement

Regulations 2025 of the Republic of Malawi under shortlisting. Participation is open to all eligible firms.

22) Submission of Expression of Interest

Interested eligible firms may submit expression of Interest to the Accountant General's Department (AGD), stating their interest and attaching the following documents for assessment;

Bidders must meet the following minimum requirements,

The firm shall furnish, alongside its expression of interest, all documents pertaining to:

i. Official letter on firm's letterhead expressing interest together with the financial proposal for carrying out the assignment
ii. Detailed company profile that includes number of years in providing similar services in Malawi or elsewhere, number of professional staff (permanent / temporary) qualified to perform the services as mentioned above
iii. Business registration
iv. Compliance with taxation.
v. SAP certified key personnel, or evidence of a partnership / sub-contracting arrangement with a certified SAP partner for the SAP integration work List of Directors of the company and their addresses.
vi. Audited financial statements for the past two (2) years.
vii. Detailed holder signed Resumes (CVs) of key personnel.
viii. Partnership or Joint Venture agreements, where applicable.
ix. Relevant past experience and evidence of previously developed Android mobile applications (e.g. screenshots, demo or store links) for the past four years

Interested firms may obtain further information from the Procurement and Disposal Unit +265 9 995 8 55 15 or email: procurement@agd.gov.mw. or from the address below during working hours from 08:00 am to 12.00 noon and from 13.00 hours pm to 16.30 hours on all working days

Sealed Expressions of Interest- EoI {One ORIGINAL & Four COPIES must be deposited in the tender box at the address below in person by **03rd December, 2026 before 10:00 hours local time** and the sealed envelope must be clearly **marked "**

Expression of interest for consultancy services for electronically public asset tagging, development of an android mobile asset verification application and integration of asset tagging system with SAP- IFMIS for proper asset tracking and reporting in all MDAs

Address of Submission

The Chairman,

Internal Procurement and Disposal Committee,

Accountant General's Department,

Ground Floor, Tender Box placed at the entrance

Capital Hill

P.O. Box 30140,

Lilongwe 3.

Malawi

Email : *procurement@agd.gov.mw*

Phone: +265 9 998 555 15

ANNEX A: SUMMARY OF CHANGES FROM THE PREVIOUS VERSION

Area	Previous requirement	Revised requirement
Scanning devices	Supply of barcode / QR code readers and hand-held scanners (Windows CE / Windows Mobile 5.0)	Development of an Android mobile application integrated with the Asset Tagging System; recommended Android device specs (Sections 5.2, 9)
SAP-IFMIS integration	General interface with the IFMIS asset management module	Detailed two-way integration; asset numbers fetched from SAP-IFMIS; data mapping, security and reconciliation (Sections 5.4, 10)
Tag numbering	Alphanumeric code as per the Oracle numbering	SAP-IFMIS asset number encoded as barcode and QR code (Section 7)
Software requirements	Seven high-level features	Expanded web system requirements, non-functional requirements and testing / acceptance (Sections 8, 11, 12)
Deliverables	Five deliverables	Eleven deliverables with acceptance evidence and timing (Section 6)
Team	Project Manager, ICT Consultant, Technical Consultant	Added Android Developer and SAP Integration Consultant (Sections 16, 17)
Firm experience	Asset tagging experience	Added mobile app and SAP integration experience (Section 14)
Training	General ToT and user training	Detailed ToT with trainer toolkit, plus orientation on the system (Sections 5.6, 5.7)
M&E	Not included	M&E framework, KPIs, dashboard, M&E reports and evaluation (Section 5.8)
Handover	Not included	Full knowledge transfer and formal handover to AGD so it can run the system without help (Section 5.10)
Source code	Not included	Complete source code provided to the Government ICT team in a Government repository (Section 5.11)
E-Government	Not included	Department of E-Government engaged for advice and review (Sections 5.12, 18)
Technical Consultant experience	No years specified	At least three (3) years, consistent with the other roles (Section 17.5)