E-commerce VAT Identification and Compliance

1. Executive Summary

As part of the GovTech Innovation Challenge, the Ghana Revenue Authority (GRA) is seeking innovative companies to develop solutions that address the challenge of identifying taxpayers, monitoring transactions, and withholding VAT from Ghana's rapidly growing e-commerce and digital services sector operations. This call for proposals aims to identify and support innovative technologies that can improve how the GRA engages with domestic digital businesses, ensuring taxpayers identification and VAT compliance.

Challenge Elements

- Automated identification of domestic and non-resident (if applicable) e-commerce businesses
- Real-time monitoring of online transactions through payment service providers for upfront VAT deduction
- Comprehensive transaction and compliance verification
- Integration with existing GRA e-VAT portal and infrastructure

2. Context and Problem Statement

The rapid growth of online businesses has created significant tax administration challenges in Ghana. As cross-border e-commerce and digital service transactions increase, the Ghana Revenue Authority (GRA) is increasingly adapting their VAT rules to ensure both domestic and non-resident suppliers become liable for the collection and remittance of VAT. However, GRA has struggled to assess and maximise its revenue potential due to technical challenges and the complex nature of the market.

The GRA has an online portal in place (E-VAT platform) to support the registration of online businesses. However 31% of identified e-commerce businesses had not registered with GRA. Of registered businesses: 38% had not filed VAT. The identification of e-commerce entities has largely been manual, conducted by unit officers, with no dedicated system available to identify recipients or beneficiaries of online transactions. Key Characteristics of e-commerce constraining tax compliance:

- Limited domestic engagement in the registration process
- Increased anonymity due to the use of cryptocurrency wallets
- Complications in traceability when domestic business transactions happen online but payments are made offline (e.g., cash on delivery/vouchers)
- Very complex and time consuming procedure to enforce charging VAT from non-resident entities

In this context, the GRA's overarching strategic goal is building an end-to-end process to enhance e-commerce and digital services VAT compliance for both domestic and non-resident taxpayer transactions. Additionally, GRA seeks to establish a comprehensive database on e-commerce market size and activities.

Specific outcomes and KPIs that will define success and indicate resolution of the challenge:

- Increase overall E-VAT compliance by 30%
- Improve collection of VAT on digital services by 40%
- Identify at least 500 previously unregistered e-commerce businesses

The scope of this challenge is limited to online payment transactions and explicitly excludes any transactions involving a cash component or those that conclude with payment upon delivery.

3. Prior Experience & Lessons Learned

To address e-commerce taxation challenges GRA deployed unit officers to manually identify e-commerce entities through web research and domain name lookups. While this approach helped to identify several businesses, it proved labor-intensive, inconsistent, and unable to achieve comprehensive market coverage.

GRA has a possibility of integration with Ghana's domain name registry institution (NITA) as a source to constantly track and locate new online entities.

Additionally Ghana has legislation allowing the Commissioner General to appoint payment service providers as agents to collect VAT on behalf of GRA, enabling automated upfront deduction of VAT at checkout. However, implementation has been limited due to technical integration challenges.

4. Desired Outcomes and Requirements

GRA seeks Proof of Concept that focus on one or both key challenge areas:

1. Taxpayer Identification Capabilities: Solutions should identify domestic e-commerce businesses and their sectors (e.g. online platforms, gaming) through integration with third-party data aggregators and/or leveraging advanced identification methods.
   a. The capability to identify non-resident businesses, while not mandatory, is a significant advantage.
   b. Integration with possible third-party data aggregators, or leverage advanced techniques such as digital fingerprinting, web scrapping, and analysis of data from payment service providers.
   c. Build and maintain a secure, centralized database of both resident and non-resident e-commerce businesses.
   d. Generate actionable insights and analytics on market size, transaction trends within Ghana digital landscape.
   e. Provide detailed reporting of VAT collections to the GRA for audit and reconciliation purposes
   f. Workflow that allows authorized users to review and manage entities that might have been misidentified by the system.

2. Automated VAT Deduction by Payment Service Providers: Design seamless data exchange interfaces for payment service providers to exchange e-commerce transaction data.
   a. Ensure ability to monitor payments and amounts involved, enabling segregation of entities and establishment of thresholds (with cross-border transaction being a plus).
   b. Ensure VAT amounts are itemized and visible on the consumer's bill.
   c. Accurately differentiate between individuals and corporate entities purchasing digital services or e-commerce goods.

NB! This detailed description of key focus areas reflects GRA's perspective on the solution and is provided for reference. Innovative approaches and potentially more effective ways to achieve the target results are encouraged.

The following solution requirements will be essential at a later stage, should the Proof of Concept be approved for actual implementation:

● *End-to-End Integration with GRA Infrastructure*: Full compatibility with GRA's legal framework and data governance standards, seamless integration with existing GRA e-VAT portal. Collect and transmit data supporting the assessment of penalties for VAT non-compliance (detailed criteria will be defined later).
● *Security & Scalability*: Scalable systems accommodating evolving e-commerce ecosystem and increasing transaction volumes, adhering to best-in-class security/privacy standards

5. Potential impacts & benefits

The proposed solution is expected to:
● **For Ghana:**
   Identify previously unregistered e-commerce businesses and automate their registration. Improve collection of VAT on registered digital business. Contribute to the overall increase of VAT from 600 mil GHS to at least 840 mil GHS (+$20 mln).
● **For the Ghana Revenue Authority (GRA):**
   Improve operational efficiency by reducing manual processes, and transforming the current e-commerce desk into an analytical hub, cutting online business discovery time from two weeks to a matter of days (while ensuring privacy of taxpayer data).
● **For Taxpayers:**
   Address the unfair competitive advantage of VAT non compliant e-commerce businesses. The solution will promote a level playing field by ensuring that registered online businesses and offline businesses are subject to equitable tax enforcement.

6. Potential Risks

Technical risks
- Businesses deliberately evading registration and compliance by consistently changing domain names and/or registering domain names through third parties
- Integration complexity with multiple payment service providers
- Cryptocurrency transaction anonymity limiting identification capabilities

Operational risks
- Limited cooperation from payment service providers in data sharing
- Cross-border enforcement challenges with non-resident entities
- System scalability requirements for rapidly growing e-commerce volumes

Market risks
- Uneven competition within e-commerce space unless different types of e-commerce transactions (e.g. platforms, gaming companies, and social media) are thoroughly covered and monitored
- Potential disruption to legitimate business operations during implementation (e.g. due to misidentification)
- Risk of driving businesses to avoid formal payment channels

Appendix

- [Value Added Tax Act, 2013 - ACT 870](#)
- [VALUE ADDED TAX (AMENDMENT) ACT, 2022](#)
- [GRA E-VAT Portal](#)
- [GRA website](#)
- [VAT Digital Toolkit for Africa](#) (comprehensive analysis of this challenge, including potential data sources)
- Completed Challenge Canva [to be provided]
- Resources on how GRA's e-VAT platform operates, including technical and/or functional documentation [to be provided]
- Application instructions [to be provided]