

## Terms of Reference

### **Consulting Services to Transfer the AfCFTA Non-Tariff Barriers (NTB) Online Mechanism and Associated Mobile Reporting Application from Current External host to the AfCFTA Cloud-Based Infrastructure, Provide System Upgrades and Provide IT Maintenance and Backend Support**

#### General Information

<b>Project Name:</b>	African Union Commission for Building Institutions and Systems to Harness and Realize Agenda (BIASHARA) 2063
<b>Project ID:</b>	180117
<b>Consultancy Name:</b>	Consulting Service to Host and Maintain the AfCFTA NTB Online Mechanism
<b>Procurement Reference :</b>	ET-AFCFTA-490520-CS-CDS
<b>Type of Contract:</b>	Individual Consultant Selection
<b>Reporting to:</b>	Director of Trade in Goods and Competition
<b>Duration of Assignment:</b>	One Hundred and Twenty (120) Days over a period of Twelve (12) Months
<b>Start Date:</b>	December 2025

#### 1. Introduction

1.1. These terms of reference have been prepared to secure services of a full-stack Developer/Web Developer with DevOps expertise and knowledge of Non-Tariff Barriers reporting and monitoring tools to assist the AfCFTA Secretariat to transfer the hosting of the AfCFTA NTB Online Mechanism and the associated Mobile Reporting Application from the current external host to the AfCFTA cloud-based server, to provide system upgrades and to provide backend Information Technology maintenance and support of the online portal and the mobile reporting application (Android and iOS) for a period of one year.

#### 2. Background

2.1. In 2019, following the entry into force of the AfCFTA Agreement an AfCFTA NTBs Online Mechanism was developed as part of the implementation of the Agreement as

it relates to the provision of the Protocol on Trade in Goods, particularly Annex 5 on the elimination of NTBs. The objectives of the Annex include institutional structures for the elimination of NTBs; general categorisation of NTBs in the AfCFTA; reporting and monitoring tools; and facilitation of resolution of identified NTBs.

- 2.2. Article 12 on Mechanism for identifying, reporting, resolving, monitoring and elimination of NTBs makes provision for development of a mechanism, it states that ‘the reporting and monitoring tools for NTBs shall consist of a prescribed format, forms, online or any other information, communication and technology tools which will be subject to periodic review.
- 2.3. It is under this background that in 2019, the African Union Commission supported by the United Nations Trade and Development (UNCTAD), in close coordination with State Parties and African Regional Economic Communities (RECs), endorsed the development and launch of the AfCFTA NTB Online Mechanism ([www.tradebarriers.africa](http://www.tradebarriers.africa)). It was launched officially in July 2019 during the 12<sup>th</sup> African Union Extraordinary Summit in Niamey, and it became fully functional on the 13<sup>th</sup> of January 2020 with the nomination of National Focal Points from State Parties/Member States.

### **3. Context**

- 3.1. Digitalization is critical for Trade, particularly in implementing the Africa Continental Free Trade Agreement (AfCFTA). The AfCFTA is leveraging technological advancements to fast track the implementation of trade and to facilitate better movement of goods, to provide reliable e-commerce platforms for traders to name a few. The AfCFTA NTB Online Mechanism (<https://tradebarriers.africa>) for reporting, monitoring and eliminating trade barriers, is yet another reflection of the role technology is playing in furthering the AfCFTA Agenda.
- 3.2. The Portal allows for the private sector to directly report trade obstacles that they encounter whilst conducting trade such as cumbersome border procedures. This has provided the AfCFTA Secretariat, together with the governments an opportunity to not only offer support in the resolution of Non-Tariff Barriers but also analyse some of the teething issues in the commencement of trade under the AfCFTA agreement.
- 3.3. To improve user experience of the private sector and enhance the level of reporting, the AfCFTA also launched the Mobile Application feature of the Online Mechanism. Compatible to both Android and Apple, this feature revolutionizes reporting by allowing users to report NTBs on the go using their mobile phones allowing for quicker interventions and support from the AfCFTA Secretariat.

- 3.4. Continuous online presence and appropriate IT support of the AfCFTA NTB online Mechanism and the NTB Reporting Mobile application is critical to the resolution of NTBs under the AfCFTA.

#### **4. Objectives**

The overall objective of the consultancy is to assist the AfCFTA Secretariat to transfer the hosting of the AfCFTA NTB Online Mechanism from the current external host to the AfCFTA cloud-based infrastructure, to provide system upgrades and to provide backend Information Technology maintenance and support for a period of one year.

##### **Specific objectives include:**

- Transfer the AfCFTA NTB Online Mechanism from the current external host to AfCFTA Secretariat.
- Maintain and update the Mechanism and related mobile reporting application (Android and iOS) based on demands and expectations of users at continental, regional and national levels.
- Manage data exchange with other existing AfCFTA portals and other relevant web-based platforms and establish virtual subsystems within the platform where required. Enable wider use of the system through additional reporting mediums, including artificial intelligence features, text messaging; integration with device-native software and WhatsApp/submissions via mobile applications such as WhatsApp etc.
- Translate the Mechanism into additional official languages of the African Union.

#### **5. Scope of Work**

In particular, the Consultant is expected to carry out the following tasks:

##### **5.1. Support transfer of the Mechanism to the AfCFTA Cloud-Based Infrastructure and provide backend IT maintenance**

- Provide technical guidance and specifications for procurement of cloud-based server infrastructure/ hosting requirements for an AWS environment that ensures scalability, robust security, and high performance to support 24/7 system availability.
- Implement data security protocols to protect sensitive data; and ensure compliance with data privacy regulations the AU Data Policy Framework.
- Establish a comprehensive backup and disaster recovery plan to ensure data protection and rapid restoration in case of system failures.
- Ensure cloud-based infrastructure is compatible with AfCFTA data management requirements and integrates seamlessly with other systems.
- Implementing internal data quality checks, validation rules, and data integrity protocols to ensure the accuracy and reliability of data collected.

### 5.2. Support Website Upgrading

- Carry out improvements, updates and adjustments of the features and functions of the Mechanism, the mobile reporting application and other related subsystems where required.
- Develop and implement Artificial Intelligence features for more efficient interaction with the Mechanism e.g., automated responses, document vetting, chatbot integration etc.
- Develop an API interface to communicate with other AfCFTA web-based tools and related sub-systems.

### 5.3. Support the maintenance and updating of the AfCFTA NTB Online Mechanism and related App-based reporting features

- Maintain high availability performance and continuous uptime of the AfCFTA NTB Online Mechanism and associated features and the AfCFTA NTB Mobile Reporting Application and apply security updates and amendments where required.
- Enable integration between the AfCFTA NTB platforms and Regional Economic Communities platform.
- Assist with the registration of mobile phone devices for AfCFTA NTB National Focal Points, provide troubleshooting services where required.
- Respond to State Parties needs in further improving the App-based reporting features to the needs of small and informal traders and other relevant users.
- Add 2 additional official languages (Swahili and Spanish) of the African Union. The AfCFTA NTB Online Mechanism already exists in 4 official African Union Languages, Arabic, English, French and Portuguese.
- Provide technical assistance for troubleshooting, system updates, and enhancements.
- Prompt technical assistance for troubleshooting issues, with a clear and well-defined response time for different levels of issues (e.g., critical, high, medium, low) with a specific Service Level Agreement defined.
- Support ongoing user training and knowledge sharing on demand to empower end users, ensuring they can maximize system updates, new features, and enhancements.

## 6. Deliverables

- 6.1. Work Plan and Inception Report.
- 6.2. Transfer of the Mechanism from current host to AfCFTA cloud-based infrastructure, evidenced by a Completion Report.
- 6.3. Upgrade of the Mechanism to include new features and functionality, evidenced by a Completion Report.
- 6.4. Maintenance of the Mechanism, evidenced by Monthly Reports
- 6.5. Final Report

## **7. Duration of the Assignment**

The Consultancy service shall be for a period of 120 days over a period of 12 months commencing in November 2025.

- In execution of the assignment, the Consultancy will report to the Director of Trade in Goods and Competition of the AfCFTA Secretariat.
- The Consultant will be required to submit inception Report on the 10<sup>th</sup> working day of the assignment; a Monthly Reports on the last working day of every month; and the final report addressing all the Tasks in these TORs on the 11<sup>th</sup> Month of the Contract.

## **8. Qualifications and Professional experience**

The Consultant shall have the following qualifications:

- Academic Qualifications: A first level University degree, Bachelor preferably in IT or related field.
- Experience at least 6 years ,
  - o Professional experience in the design and installation of physical computing infrastructure for the delivery of information systems, with sound knowledge of server and communications technologies and related equipment.
  - o Sound experience of security devices, especially Firewalls and VPN networks, intrusion detection devices is required.
  - o Experience with data replication services and systems for ensuring information system business continuity is required.
  - o Hands-on experience of delivering similar assignments for government agencies.
  - o Experience in Cloud Platforms: AWS, Azure, or Google Cloud Platform (GCP)
  - o Hands-on experience deploying applications to cloud environments.
  - o Experience with monitoring, logging, and scaling applications in the cloud (e.g., EC2, Lambda, App Engine, Azure App Services).
  - o Experience in web application security.
  - o Experience optimizing performance for both front-end and back-end systems.
  - o Experience in Relational Database Data Modelling, construction of Entity-Relationship Models and mapping these to a physical database schema.
  - o Have experience and knowledge of web-based programming languages, web-services, relation database management products, e.g. Java, XML, MySql etc. Open Source products and open standards knowledge is essential.
  - o At least 6 years' experience in analysis/design and further 4 years programming on development of systems using relevant W3C standards, JAVA SCRIPT, VB SCRIPT, PHP, SSL, ASP.NET technologies.
  - o Sound knowledge and experience with PHP, MySQL, Apache, and ASP.NET, XML, HTML, XHTML, DHTML, SQL Server, Oracle and other database systems.
- At least 3 years in developing Non-Tariff Barriers (NTB) reporting and monitoring tools and other related tools in the African Continent.

- At least 3 years' experience on African Trade Policy, including Non-Tariff Measures, & Non-Tariff Barriers. Knowledge and experience in NTMs/NTBs is a strong asset. Experience in information/database management is an added advantage.
- Proficiency in English and/or French. A working knowledge of other AU languages is an added advantage.

## 9. Evaluation and Qualification Criteria

9.1. Interested individuals should provide information on their qualifications and experience demonstrating their ability to undertake the assignment (CV and testimonials in form of contracts or reference letters or completion of service certificates as proof of similar assignments) and technical proposal outlining the technical approach and methodology for delivery of the assignment.

9.2. Shortlisted consultants will be evaluated on the following criteria based on the information provided in their CV, copies of certificates, testimonials and technical proposal.

#	Qualifying Criteria	Points
1	<b>General Education, Qualification and Relevant Training.</b> Consultant to indicate the name and type of degree obtained, the year of the degree and must attach copies of certificates to support qualification. <ul style="list-style-type: none"> <li>• Relevance, including certification – 15%</li> <li>• Attached certificates – 5%</li> </ul>	<b>20</b>
2.	<b>Relevant Experience</b> <ul style="list-style-type: none"> <li>• Professional experience in the design and installation of physical computing infrastructure for the delivery of information systems, with sound knowledge of server and communications technologies and related equipment.</li> <li>• Sound experience of security devices, especially Firewalls and VPN networks, intrusion detection devices is required.</li> <li>• Experience with data replication services and systems for ensuring information system business continuity is required.</li> <li>• Hands-on experience of delivering similar assignments for government agencies.</li> <li>• Experience in Cloud Platforms: AWS, Azure, or Google Cloud Platform (GCP).</li> <li>• Hands-on experience deploying applications to cloud environments.</li> </ul>	<b>50</b>



	<ul style="list-style-type: none"> <li>• Experience with monitoring, logging, and scaling applications in the cloud (e.g., EC2, Lambda, App Engine, Azure App Services).</li> <li>• Experience in web application security.</li> <li>• Experience optimizing performance for both front-end and back-end systems.</li> <li>• Experience in Relational Database Data Modelling, construction of Entity-Relationship Models and mapping these to a physical database schema.</li> <li>• Have experience and knowledge of web-based programming languages, web-services, relation database management products, e.g. Java, XML, MySql etc. Open Source products and open standards knowledge is essential.</li> <li>• At least 6 years' experience in analysis/design and further 4 years programming on development of systems using relevant W3C standards, JAVA SCRIPT, VB SCRIPT, PHP, SSL, ASP.NET technologies.</li> <li>• Sound knowledge and experience with PHP, MySQL, Apache, and ASP.NET, XML, HTML, XHTML, DHTML, SQL Server, Oracle and other database systems.</li> <li>• At least 3 years in developing Non-Tariff Barriers (NTB) reporting and monitoring tools in the African Continent.</li> <li>• At least 3 years' experience on African Trade Policy, including Non-Tariff Measures, &amp; Non-Tariff Barriers. Knowledge and experience in NTMs/NTBs is a strong asset. Experience in information/database management is an added advantage.</li> <li>• Proficiency in English and/or French. A working knowledge of other AU languages is an added advantage.</li> </ul>	
3.	Oral Interviews	30
<b>TOTAL</b>		<b>100</b>

9.3. The minimum technical qualification is 80%. The first ranked consultants with the highest score and meeting the minimum technical qualification will be invited for negotiation and subsequently be selected for the assignment if his/her fee rate is within the budget.