



ECOWAS COMMISSION



AFRICAN DEVELOPMENT BANK

Financing Agreement reference: Grant No 5900155016360
Project ID No. P-Z1-KF0-065

REQUEST FOR EXPRESSIONS OF INTEREST

CONSULTANCY SERVICES FOR THE SELECTION OF 2 INDIVIDUAL CONSULTANTS FOR THE ESTABLISHMENT OF ELECTRONIC ECOWAS CERTIFICATE OF ORIGIN (eCO)

1. This request is for expression of interest following the General Procurement Notice (GPN) for the above mentioned project that appeared in Development Business.
2. The ECOWAS commission has started a group of projects which aim at the removal of non-tariff barriers, lowering of trading costs at borders, improving trade infrastructure and automation of customs procedures, the Digitization of Certificate of Origin including its acquisition, transmission and reception. The actions planned under this Program specifically complement ECOWAS plans to be a single trade and investment area in which tariffs, and other impediments to the movement of goods, services, capital, and people will be removed. The general objective of the Program is to contribute to deepening regional integration, improving inclusive regional economic growth and enhancing competitiveness of the ECOWAS region. As a result, ECOWAS Commission in partnership with GIZ intends to apply a portion of the African Development Bank Grant for the **Selection of 2 Individual Consultants for the establishment of electronic ECOWAS Certificate of Origin (ECO)**
3. The Services expected to be carried out by the Consultants are, but not limited to the following:
 - a) Develop the e-HUB with a standard application programming interface (API) for interfacing/integration of the eCo Middleware/Library (locate at members states) system and handover to the ECOWAS commission any source code that may be applicable related to development of the system;
 - b) Develop Middleware/Library that will interface the customs system of the member state with the e-Hub and handover to the ECOWAS commission any source code that may be applicable related to development of the system;
 - c) Developing and operationalizing user-friendly WEB Application for e-Hub and handover to the ECOWAS commission any source code that may be applicable related to development of the system;
 - d) Implement a strong authentication system to support the e-Hub and other systems around it and handover to the ECOWAS commission any source code that may be applicable related to development of the system;

- e) Develop an e-Co Client module for the ASYCUDA World Customs System and make it communicate with e-Co middleware and handover to the ECOWAS commission any source code that may be applicable related to development of the system;
- f) Provide expertise advise on public key infrastructure (PKI), Modality for interfacing the eCO system (Hub, Middleware/Library) and Customs systems, process and modalities to implement eCO and digital signature, required legislative amendments and ICT equipment and infrastructure for full implementation of eCO system based on international best practices and standards;
- g) Assist in the configuration (installation, backups, replication) of the database systems used by the e-Co ecosystem;
- h) Assist in the configuration (installation, backups) of the operating systems used by the e-Co ecosystem;
- i) Assist in the configuration (installation, management) of the authentication systems used by the e-Co ecosystem;
- j) Assist in the configuration (installation) of the firewall systems used by the e-Co ecosystem;
- k) Assist in configuring web load balancers for the e-co ecosystem;
- l) Assist in the configuration of the monitoring systems for the entire e-co ecosystem;
- m) Assist the project team in defining access policies to the systems;
- n) From start to finish of project, produce project Documentation.
- o) Provide technical assistance and capacity building support to Regional developers, Deployment Team on deployment procedures and eCO System, Member states on operational procedures;
- p) Assist in preparing progress report of implementation of the eCO system; monitoring and evaluation of the impact of eCO system implementation and prepare recommendations to improve the implementation and a sustainability strategy and plan after the end of the project;
- q) Undertake other related tasks as may be required by the supervising Directorate of the ECOWAS commission and GIZ

		CONSULTANTS	
	REQUIREMENTS	Expert 1 – IT Engineer (Tech Lead)	Expert 2 - ASYCUDA World Expert
1	Qualification	Degree in computer science or post graduate professional qualification in computer science, Software Engineering or related field	Degree in computer science or post graduate professional qualification in computer science, Software Engineering or related field
2	General Experience	At least 10 years relevant professional experience in Software Development and deployment related areas at national, regional or international levels	General Experience: At least 7+ years relevant professional experience in Customs and Trade Software Development and deployment related areas at national, regional or international levels

3	Specific Experience	<ul style="list-style-type: none"> a) Proven hands-on experience in Software Development with Java EE platforms, b) Object Oriented analysis and design using common design patterns. c) Excellent knowledge of Relational Databases (PostgreSQL is plus), SQL and ORM technologies (JPA2, Hibernate) d) Proven experience in the Quarkus framework or Spring Framework e) Experience in developing web applications using at least one popular web framework (angular is plus) f) Extensive programming experience in HTML5, CSS3, Bootstrap, Foundation or Materialize g) Excellent Javascript knowledge and programming experience with ES5/ES6 h) Solid development experience in Angular i) Experience with test-driven development j) Working exp in Agile/scrum methodology k) Ability to understand and design distributed systems and proven hands-on experience in developing and implementation of PKI Infrastructure including e-signature/digital signature and cyber security; l) Solid understanding and extensive experience with version control tools like Git, CVS m) Prior operational experience in information communication technology (ICT) systems in a customs and trade environment such as ASYCUDA World system; n) Advanced knowledge of Systems Integration with emphasis on Apache Active 	<ul style="list-style-type: none"> a) Prior operational experience in information communication technology (ICT) systems in a Customs and Trade Environment such as ASYCUDA World system and proven in-depth knowledge on implementing electronic Single Window Systems; b) Proficiency in Module Development for ASYCUDA World c) Proficiency in ASYCUDA World Integration with third party systems d) 7+ years working in front-end web development e) Excellent knowledge of Relational Databases (PostgreSQL is plus), SQL and ORM technologies (JPA2, Hibernate) f) Good understanding of Customs Statistics g) Knowledge of Java EE/Spring/Quarkus is considered a plus h) Experience consuming REST APIs i) Advanced knowledge of systems integration with emphasis on Apache Active MQ/Artemis and Apache Camel; j) Identity and Access Management with emphasis on Keycloak (Single-Sign on, OpenID Connect, OAuth 2.0, Centralized Management, adapters, user federation) k) Extensive programming experience in HTML5, CSS3, SASS or LESS, and Bootstrap, Foundation or Materialize l) Excellent Javascript knowledge and programming experience with ES5/ES6 m) Solid understanding and development experience in Angular n) Solid understanding and extensive experience with version control tools like Git, CVS o) Exceptional problem solving and ability to work independently
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		<p>MQ/Artemis and Apache Camel;</p> <p>o) Identity and Access Management with emphasis on Keycloak (Single-Sign on, OpenID Connect, OAuth 2.0, Centralized Management, adapters, user federation)</p>	p) Exceptional learning skill
4	Additional Skills	<p>a) Linux and OS Concepts (Proficient in Shell Commands, Linux File System, Proficient in Linux Systems Admin (Ubuntu, Debian, Red Hat), SSH Key Management, Installing different tools on servers DNS, HTTPD, SSH, SSL, Open VPN, Apache, Nginx, HAProxy, Linux KVM, Ubuntu, Debian, Red Hat, Ansible or Chef, Firewalls (iptables, UFW)</p> <p>b) Advanced proficient in Networking & Security (Ip addresses, DNS, routing, firewalls and ports, basic utilities like ping, ssh, netstat, NCR and IP, load balancing, and TLS encryption)</p> <p>c) Advanced proficient in Monitoring Systems and Log Management Systems (Nagios, ELK Stack, Netdata, etc)</p> <p>d) Working exp in Agile/scrum methodology</p> <p>e) Good knowledge and experience in IT project planning and management, leadership in implementation of ICT related projects, business process analysis and reporting writing</p>	<p>a) Experienced in handling customs data good knowledge of customs data analysis</p> <p>b) Linux and OS Concepts (Proficient in Shell Commands, Linux File System, Proficient in Linux Systems Admin (Ubuntu, Debian, Red Hat)</p> <p>c) Good knowledge and experience in IT project planning and management, leadership in implementation of ICT related projects, business process analysis and reporting writing</p>
5	Language proficiency	<p>Good communication skills and Good command in English, French, or Portuguese language. Knowledge of a second ECOWAS official languages will be an advantage.</p>	<p>Good communication skills and Good command in English, French, or Portuguese language. Knowledge of a second ECOWAS official languages will be an advantage.</p>

4. The duration of the assignment is Two Hundred and Eighteen (218) working days. (The Consultants will mainly work remotely due to COVID-19 pandemic situations based an agreed work plan and methodology, provided that the expected results of the task are not affected, with possible travel to Member States to be agreed between ECOWAS and the consultant).

The ECOWAS Secretariat now invites eligible Individual Consultants to indicate their interest in providing these services. Interested Individual Consultants shall be shortlisted based on the following criteria:

Full details of the requirements are contained in the Terms of Reference (TOR) attached.

5. The Eligibility criteria, preparation of the short-list and the selection procedure shall be in accordance with the African Development Bank's "Rules and Procedures for the use of Consultants" – May 2008 Edition Revised July 2012, which is available on the Bank's website at <http://www.afdb.org>.

6. Interested individual consultants can obtain further information at the e-mail addresses mentioned below during working hours: 9.00am - 5.00pm, Nigerian Time, (GMT + 1) Mondays through Fridays (except public holidays): sbangoura@ecowas.int, with copy to: procurement@ecowas.int, ayameogo@ecowas.int, fkwame@ecowas.int; gdikko@ecowas.int;

7. Expressions of Interest will be submitted by mail and clearly marked "**Consultancy for the Selection of 2 Individual Consultants for the establishment of Automated ECOWAS Certificates of Origin (ECO)**", to the address below latest by **Tuesday August 23rd , 2022 at 11.00 am (GMT+1), Nigerian Time**:
sbangoura@ecowas.int with copy to procurement@ecowas.int, ayameogo@ecowas.int, fkwame@ecowas.int; gdikko@ecowas.int

This EOI and TOR are also published on the ECOWAS website <http://www.ecowas.int/doing-business-in-ecowas/ecowas-procurement>

8. The Expression of Interest should be submitted in English or French .