

REQUEST FOR EXPRESSIONS OF INTEREST (CONSULTANCY SERVICES) RWANDA CENTER OF EXCELLENCE FOR AVIATION SKILLS (CEAS) PROJECT

Education and Skills Sector

Financing Agreement reference: Loan No.2100150044143

Project ID No.: P-RW-IA0-006

The Government of Rwanda (GoR) has received financing from African Development Fund (ADF) toward the cost of the *Supervision Consultancy Services for the Construction of academic block and Aircraft Hangar at Kigali International Airport* and intends to apply part of the agreed amount for this grant to payments under the contract for Supervision services of the construction works of the Centre of Excellence for Aviation Skills.

The services included under this project are:

Supervision services of the construction works of the Centre of Excellence for Aviation Skills, ensuring it is equipped with state-of-the-art, sustainable, and climate-responsive features. The supervision of construction works is expected be completed within twenty (20) months after signing the contract with an additional project liability period not less than Twelve (12) months.

The works contract consists of the following:

- ➤ Construction of Academic Block 1. This academic block will entail classrooms; aircraft maintenance workshops; flight simulator rooms, technician's simulator rooms; briefing rooms; cabin crew training workshops; CBT rooms; exam rooms; digital electronics labs; conference rooms and post flight rooms. In addition, it will have a library; operations room; control room; cafeteria/ dining; office space area; lobby area and kitchen.
- ➤ Construction of the Hangar, Stores and Office complex. This will entail a Hangar for engineer practical training and school aircraft maintenance area; a taxiway to connect the Hangar to main runway; Storage space for 9 helicopters or training aircraft; 8 aircraft parking spaces in apron area; Conference Room, Reception, Library.

The Rwanda Development Board now invites eligible consultants to indicate their interest in providing these services. Interested consultants must provide information indicating that they are qualified to perform the services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.). Consultants may constitute joint-ventures to enhance their chances of qualification.

The detailed Terms of References can be found on the following website https://rdb.rw/media/#tenders

Eligibility criteria, establishment of the short-list and the selection procedure shall be in accordance with the African Development Bank's "*Procurement Policy for Bank Group Funded Operations*" dated October 2015, which is available on the Bank's website at http://www.afdb.org.



Interested firms may obtain further information at the email address below during office hours from 09:00 AM to 5:00 PM Rwanda Local Time.

Expressions of interest can be delivered electronically to the following email address spiu.procurement@rdb.rw
by Monday 7th October 2024th at 04:00 PM Kigali and mention: "Supervision consultancy Services for the Construction of academic block and Aircraft Hangar at Kigali International Airport"".

Attn: Rwanda Development Board (RDB)

Joseph Cedrick Nsengiyumva

Chief Financial Officer

P.O Box: 6239 Kigali-Rwanda RDB Building, 1 KG 9 Ave Phone: +250788312385

Email: spiu.procurement@rdb.rw



TERMS OF REFERENCE FOR SUPERVISION CONSULTANCY SERVICES FOR THE CONSTRUCTION OF ACADEMIC BLOCK AND AIRCRAFT HANGAR AT KIGALI INTERNATIONAL AIRPORT

1. Background

The project of developing the Centre of Excellence for Aviation Skills (CEAS) is anchored on the Bank's Rwanda Country Strategy Paper (2022-2026) and aligned with priority area to which is improving skills and financial capabilities to foster private sector and productivity-led growth. Increasing national and regional competitiveness is being pursued actively by the Government of Rwanda (GoR) through enhancing its air transport competitiveness. The GoR recognizes the transport sector as one of the key drivers of growth. Improving the quality and reliability of transport is critical to reducing transport costs and attracting domestic and foreign investment in Rwanda. Among other GoR's investment strategy and capacity building programme includes the establishment of aviation training Academy.

Aviation international qualification standards is a requirement for this industry. A major challenge in Rwanda relating to human resources required by the aviation industry is the number of a skilled workforce to comply with Aviation sector regulated standards.

The client has secured funds from the African Development Bank (AfDB), through its African Development Fund (ADF) to build a skilled workforce to meet national and international aviation training standards through the construction of the CEAS that improves institutional capacity to deliver high quality training through accreditation and certification with international accrediting bodies that includes among others European Union Aviation Safety Agency (EASA), increase pool of domestic certified aviation experts through quality training that meets international standards and enhance institutional capacities and frameworks of training as recommended by global Aviation best practices.

The GoR, the client is looking for qualified firms to carry out the supervision services for the aforementioned project in line with the country's ambitions to green growth responding to the Rwanda Building Codes, applicable policies and standards for green buildings design and construction approved by the Ministry of Infrastructure, shall be applied during the development of the project.

2. OBJECTIVES, PURPOSE & EXPECTED RESULTS

This activity consists of design review and supervision of the construction works of the CEAS ensuring it is equipped with state-of-the-art, sustainable, and climate-responsive features. The supervision of construction works is expected be completed within twenty (20) months after signing the contract with an additional project liability period not less than Twelve (12) months.

3.SCOPE OF WORKS

The works contract to be supervised includes:

- ➤ Construction of Academic Block 1. This academic block will entail classrooms; aircraft maintenance workshops; flight simulator rooms, technician's simulator rooms; briefing rooms; cabin crew training workshops; CBT rooms; exam rooms; digital electronics labs; conference rooms and post flight rooms. In addition, it will have a library; operations room; control room; cafeteria/ dining; office space area; lobby area and kitchen.
- ➤ Construction of the Hangar, Stores and Office complex. This will entail a Hangar for engineer practical training and school aircraft maintenance area; a taxiway to connect the Hangar to main runway; Storage space for 9 helicopters or training aircraft; 8 aircraft parking spaces in apron area; Conference Room, Reception, Library.



4. DESCRIPTION OF THE ASSIGNMENT

The client is seeking to procure a qualified supervision firm to provide supervision services that include but not limited to:

- (a) Review the proposed project designs and approve contractor's initial works schedule and the additional construction program for compliance with the completion requirements specified in the clients requirements and the relevant construction contract. And, if necessary, recommend to the client and the Contractor any amendments which may be necessary. In addition, in consultation and collaboration with the Client's Engineer, prepare the coordinated work schedule for the whole project. Monitor the progress of the construction works against the approved construction program and report any variance, promptly give written notice of the variance to the Contractor and the client.
- (b) Carry out construction works supervision and contract administration services in accordance with the power and authority to be delegated by the Client as stipulated in his contract;
- (c) Provide any technical or managerial assistance to the client concerning variations and claims which are to be ordered/issued at the initiative of the Client. Advise the client on resolution of any dispute with the Contractor;
- (d) Issue instructions, approvals of submittals, request for information (RFI) and notices as appropriate subject to prior consultation with the Client;
- (e) Provide recommendations to the Client for acceptance of the Contractor's performance security, advance payment security and required insurances;
- (f) Assess adequacy of all inputs such as materials, labor and equipment provided by the Contractor;
- (g) Check and approve the Contractor's method of work, including site organization, program of performance, quality assurance system, safety plan, method statements of safety, and environmental monitoring plan so that the requirements set forth in the applicable laws and regulations, the specifications or other parts of the contract are to be duly respected;
- (h) Regularly monitor physical and financial progress, and take appropriate action to expedite progress if necessary, so that the time for completion set forth in the contract will be duly respected by the Contractor;
- (i) Explain and/or adjust ambiguities and/or discrepancies in the Contract Documents and issue any necessary clarifications or instructions. Issue further drawings and give instructions to the Contractor for any works which may not be sufficiently detailed in the contract documents, if any;
- (j) Review and approve the Contractor's working drawings, shop drawings and drawings for temporary works. Also review and approve, if any, design prepared by the Contractor for any part of the permanent works;
- (k) Liaise with the appropriate authorities to ensure that all the affected utility services are promptly relocated.
- (l) Carry out field inspections on the Contractor's setting out of the works in relation to original points, lines and levels of reference specified in the contract;
- (m)Organize, as necessary, site or management meetings with the Contractor to review the arrangements for future work. Prepare and deliver minutes of such meetings to the Client and the Contractor;
- (n) Supervise the works so that all the contractual requirements are met by the Contractor, including those in relation to i) quality of the works, ii) safety and iii) protection of the environment. Confirm that an accident prevention officer proposed by the Contractor is duly assigned at the project site. Require the Contractor to take appropriate remedies if any questions are recognized regarding the safety measures;
- (o) Supervise field tests, sampling and laboratory test to be carried out by the Contractor;



- (p) Inspect the construction method, equipment to be used, workmanship at the site, and attend shop inspection and manufacturing tests in accordance with the specifications;
- (q) Survey and measure the work output performed by the Contractor, verify statements submitted by the Contractor and issue payment certificates such as interim payment certificates and final payment certificate as specified in the contract;
- (r) Coordinate the works among different contractors employed for the Project ensuring that all the environmental and social impact mitigation and monitoring measures in the Project's Environmental and Social Management Plan (ESMP) and Environmental and Social Impact Assessment (ESIA) are appropriately executed by the contractors and perform environmental, social, gender and health & safety monitoring during all stages of the Project
- (s) Ensure road safety and traffic management measures are met during construction works;
- (t) Modify the designs, technical specifications and drawings, relevant calculations and cost estimates as may be necessary in accordance with the actual site conditions, and issue variation orders (including necessary actions in relation to the works performed by other contractors working for other projects, if any).
- (u) Carry out timely reporting to the Client for any inconsistency in executing the works and suggesting appropriate corrective measures to be applied. The consultant will propose a monitoring tool to estimate physical and financial progress of the project on a weekly and monthly basis to be used for a smooth implementation of the project;
- (v) Inspect, verify and fairly determine claims issued by the parties to the contract (i.e. the Client and Contractor) in accordance with the civil works contract;
- (w) Perform the inspection of the works, including Test on Completion, and to propose to the client the issuing of the certificates such as the Taking-Over Certificate, Performance Certificate as specified in the contract;
- (x) Provide periodic and/or continuous inspection services during defects liability period and if any defects are noted, instruct the Contractor to rectify; and
- (y) Verify and approve the as-built drawings prepared by the contractor.
- (Z) Assistance During the Defects Liability Period, the firm shall ensure that all defects and remarks are properly cleared/removed by the contractors as per the contract and submit quarterly reports to the client. Also ensure that all operation and maintenance manuals and all type of as-built drawings are submitted and handed over to the client as per the requirement and quantity specified in the contracts. During the guarantee period, the firm shall answer questions sent to them by fax or email from their present location

5. Reporting:

The consultant will prepare and submit regular Monthly Progress and Quarterly Reports, the Monthly Progress report shall be describing briefly and concisely all activities and progress for the previous month by latest the 15th day of each month with full information related to project's (scope, schedule and budget) implementation status, included but not limited to successful works implemented, issues encountered or anticipated will be clearly stated, together with actions to be taken or recommendations on remedial measures for correction also indicates the work to be performed during the coming month. While **Quarterly Reports** will cover the work completed within three consecutive months with successful achievements or any challenges met.

Completion Report: Comprises a full size of as-built drawings for all the structures and facilities and infrastructure completed, and the final details of the construction completed together with all data, records and material tests results among other project relevant documents due.



6. DURATION OF THE CONTRACT

The duration of the proposed contracts will be Twenty (20) months design review and supervision of construction of works for the project with an additional defects liability period of not less than 12 months.

7. MINIMUM REQUIREMENTS FOR THE FIRM

7.1. Qualification and experience of the Supervision engineering firm:

- The consulting firm must be registered as an engineering firm in the country of origin and recognized by a relevant professional body with a valid certificate.
- Notarized proof of collaboration with Green Building Rating System that include among others Leadership in Energy and Environmental Design (LEED) or EDGE during the post-construction stage.
- The consulting firm should have more than (10) years of experience in the field of engineering.
- A record of five (5) similar project scope in design and supervision of infrastructure facilities must be provided in the form of a list with contact details of previous clients with at least two (2) good completion certificates together with contracts of executed projects with a green component whose value of each is not less than 9 billion RWF.

7. 2 Qualification and experience of the team composition

The proposed team shall include the following key personnels:

- 1. Team Leader (1)
- 2. Design Architect (1)
- 3. Land Surveyor (1)
- 4. Civil engineer (1)
- 5. Structural Engineer (1)
- 6. Geotechnical engineer (1)
- 7. Mechanical, Electrical & Plumbing (MEP) Engineer (1)
- 8. Quantity surveyor (1)
- 9. Environmental and social safeguard expert (1)
- 10. Furniture, Fixtures, and Equipment (Interior Design) expert (1)

It is desirable that majority of the key professional staff proposed be permanent employees of the firm or have an extended and stable working relationship with it.

7.2.1. Qualifications and experience of the team

1	Team Leader		
Qual skills	lifications and	>	At least a Master's degree in Construction Project Management or Engineering related courses with background in Civil Engineering or Architecture proven by notarized degree. Proof of Registration in respective professional of national or international
			reputation body proven by a valid practicing Certificate.



Adequacy for the assignment	At least 10 years of working experience in construction project management capacity with; > Proof of experience as project manager on construction projects in terms of scale and complexity/ At least three references must be provided to back the required experience. > Experience in coordination of design team on construction project similar in terms of scale and complexity.
Knowledge Region & language	> Past work experience in Sub Saharan region is an added advantage. > Proficiency in English

2	Design Architect	
Qu skil	alifications and lls	> At least a Bachelor's degree in Architecture proven by notarized degree.
		Proof of Registration in respective professional of national or international reputation body proven by a valid practicing Certificate.
	equacy for the ignment	 Specific experience At least 10 years of working experience in developing architectural design with; Proof of experience as lead architect designer on projects similar in terms of scale and complexity. At least three references must be provided to back the required experience. Proof of experience as architect designer on projects of educational facilities. Proof of experience as architect designer in project with strong environmental design principles
reg	owledge of the ion	Past experience in Sub Saharan Africa is an added advantage
& 1	anguage	Proficiency in English

3	Land Surveyor		
Qualifications and skills		>	Bachelor's degree in topographic surveying proven by notified degree provided by the competent organ and a valid practicing Certificate.
		>	Registered in respective professional of national or international reputation body proven by a valid practicing Certificate



Adequacy assignment	for		Specific experience At least 5 years of working experience in land survey with; - Proof of experience as land survey on projects similar in terms of scale and complexity. At least three references must be provided to back the required experience.
Knowledge region	of	the	➤ Past experience in Sub Saharan Africa is an added advantage
& language			Proficiency in English

4	Civil Engineer	
Qualifications and skills		At least a Bachelor's Degree in Civil engineering or Structural Engineering proven by notarized degree with at least 7 years of relevant working experience.
		Registered in respective professional of national or international reputation body proven by a valid practicing Certificate.
Ade	quacy for the	Specific experience
assig	gnment	 Proof of Experience as civil engineer on projects similar in terms of scale and complexity (new construction and rehabilitation / seismic design). At least three references must be provided to back the required experience. Proof of experience as civil engineer in project build with BioSource materials: wood, stones, earth, straw etc. Proof of experience in green infrastructure development project in the region
regi		➤ Past experience in Sub Saharan Africa is an added advantage.
& la	nguage	Proficiency in English

5	Structural Eng	ineer
Qualifications and skills		 A Master's degree in Structural Engineering or Civil Engineering proven by notarized degree. with at least 5 years of relevant working experience. Or At least a Bachelor's Degree in Civil engineering or Structural Engineering proven by notarized degree with at least 10 years of relevant working
		 experience. Registered in respective professional of national or international reputation body proven by a valid practicing Certificate.



Adequacy for the	Specific experience
assignment	At least 5 years of working as projects structural engineer with;
	Proof of Experience as structural engineer on projects similar in terms of scale and complexity (new construction and rehabilitation / seismic design). At least three references must be provided to back the required experience.
	Proof of experience as structural engineer in project build with BioSource materials: wood, stones, earth, straw etc.
	Proof of experience in carbon embodied calculations (if not provided by the environmental engineer).
Knowledge of the region	➤ Past experience in Sub Saharan Africa is an added advantage.
& language	Proficiency in English

6	Geotechnical Er	ngineer
Qua skill	alifications and	At least a Bachelor degree in Geotechnical Engineering proven by notarized degree.
		Proof of registration in respective professional of national or international reputation body proven by a valid practicing Certificate.
Ade	quacy for the	Specific experience
assig	gnment	At least 7 years of working experience in geotechnical engineering with
		Proof of experience as geotechnical engineer on construction projects similar in terms of scale and complexity. At least three references must be provided to back the required experience
		Experience in slope stability, retaining wall, foundation design, seismic design.
Ex	perience in	Past experience in Sub Saharan Africa is an added advantage.
1	gion & language	Proficiency in English

7 Mechanical, Ele	Mechanical, Electrical & Plumbing (MEP) Engineer		
Qualifications and skills	At least Bachelor degree in Mechanical Engineering or Building Services proven by notarized degree.		
	Proof of Registration in respective professional of national or international reputation body proven by a valid practicing Certificate.		



engineering works; Proof of experience as MEP e and complexity with spanne plumbing components of simil		At least 7 years of working experience in mechanical, electrical and plumbing engineering works;
		 Experience on construction project in the region.
Experience region	in	➤ Past experience in Sub Saharan Africa is an added advantage.
& language		Proficiency in English

8 Quantity Surve	Quantity Surveyor	
Qualifications and skills	➤ At least a Bachelor of Science degree in Quantity Surveying with proven by notarized degree.	
Adequacy for the assignment	General experience At least 7 years of working experience in quantity surveying. Specific experience ➤ Proven experience as quantity surveyor on projects similar in terms of scale and complexity. At least three references must be provided to back the required experience	
in region & language	 Past experience in Sub Saharan Africa is an added advantage. Proficiency in English 	

09	Environmental	and social safeguard Expert		
Qualifications and skills		➤ At least a Master's degree level in Environment with experience in the relevant field as project manager		
	quacy for the nment	 General experience At least 8 years of working experience in environmental and social safeguards with ➤ Proven experience on Environmental Impact Assessment (EIA). At least three references must be provided to back the required experience. ➤ Experience in writing Environmental, Social, Health and Safety specifications for work tender 		



Experience region	in	 Experience of Rwandan EIA process 	
& language		Proficiency in English	

10	Furniture, Fixtu	ares, and Equipment (Interior Design) expert (1)		
Qualifications and skills		At least a bachelor's degree level in mechanical engineering with an extensive experience in Furniture, Fixtures, and Equipment set for similar project scope		
Adequacy for the assignment		 General experience At least 5 years of working experience in furniture and equipment in the building development of learning facility projects. Specific experience Proven experience on construction projects for the definition of the technical specifications of furniture and equipment for learning institutions. At least two references must be provided to back the required experience. 		
-	erience in on Language	 Past experience in Sub Saharan Africa is an added advantage. Proficiency in English 		