**WEST AFRICAN POWER POOL**

*Economic Community*

*Of West African States*

*Communauté Economique*

*Des Etats de l’Afrique de l’Ouest*

**SYSTEME D'ECHANGES D'ENERGIE ELECTRIQUE OUEST AFRICAIN**

***General Secretariat / Secrétariat Général***

**Terms of Reference**

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Terms of Reference

Technical Projects Coordinator

**Technical Projects Coordinator for the West African Power Pool**

1. ***Background***

The West African Power Pool (WAPP) was established by the highest Decision-making Authority of the Economic Community of West African States (ECOWAS) and the Conference of Heads of States and Government of the Member States. It aims at integrating the national power systems into a unified regional power market, so that such a mechanism would, over the medium to long term ensure to the ECOWAS citizens, access to adequate power quality at an affordable price, and ensure the economic development of the Member States. To achieve this goal, WAPP's mission is to promote and develop power generation and transmission infrastructure and coordinate as well the exchange of electrical energy between ECOWAS Member States.

Its implementation strategy is based on the realization of mutually reinforcing complementary infrastructure sub-programs encompassing various regional power generation and transmission projects that, once implemented, would lead to the integration of the entire power grids in West Africa. The WAPP Infrastructure Program derives from the ECOWAS Power Generation and Transmission Master Plan developed in 1999, revised in 2005, and the updated version of which was approved for implementation by the Conference of ECOWAS Heads of State and Government in February 2012.

This approved Master Plan, provides for investment needs up to 26.42 billion US$ involving, among others, the construction of approximately 16, 000 km power transmission lines, the completion of hydroelectric energy projects of 7,092 MW and 800 MW of renewable energy projects by 2012 - 2025. The implementation of these projects will allow the complete interconnection of the entire national electricity networks of ECOWAS Member States, favoring thereby power trade, the significant improvement not only of its access at lower cost, but also, the quantity and quality of its supply. This will contribute to alleviating poverty and improving the economic well-being of ECOWAS citizens.

For the implementation of this Master Plan, the WAPP General Secretariat has benefited from the constant support of Technical and Financial Partners, notably the World Bank, which supports the development of several projects, including the South Backbone Project (Ghana- Togo-Benin), the North Backbone Project (Nigeria-Niger-Benin / Togo-Burkina), the Guinea-Mali Interconnection Project and the CLSG Project (Côte d’Ivoire-Liberia-Sierra Leone-Guinea).

As part of the ongoing CLSG project, the WAPP General Secretariat is benefiting from a World Bank Technical Assistance Program to develop, inter alia, priority power transmission infrastructure projects, hydroelectric projects that enable to increase power supply, in connection with the CLSG project. In order to fill the financing gap for the construction of the line in Liberia and Sierra Leone, the World Bank has granted additional financing and extended project-related activities in order to increase its viability, including the development of complementary sources of hydroelectric generation. To this end, it is planned to extend the Assistance Program to the WAPP General Secretariat to include the preparation of pre-investment studies for new hydropower projects in Liberia.

1. ***Consistency of the Technical Assistance Programme***
2. **Core Programme**

The proposed core programme as part of the CLSG Project provides for the preparation and the development of hydroelectric projects, in connection with the CLSG line and support to WAPP General Secretariat for the implementation of activities to enable the integration of its power system.

In this context, the WAPP General Secretariat has prepared the Souapiti Hydropower Plant project under construction and is currently preparing the pre-investment studies of the Amaria Hydropower Plant as well as preparatory activities for the establishment of the institutional framework to enable the Nigeria-Niger-Benin/Togo-Burkina Interconnection Project, commonly known as the North Core to be completed as soon as possible and, at lower cost.

* **Pre-investment Studies for Amaria Hydropower Plant**

The Pre-investment Studies for the Amaria Hydropower Plant consist of preparing, on the one hand, the Feasibility Studies, Detailed Design and Bidding Documents and, on the other hand, the Environmental and Social Impact Studies. The objective is to establish the technical, economic, financial and environmental viability of the project and define the institutional and commercial framework for the implementation of the project.

The Environmental and Social Impact Studies include, among others:

* Preparation and realization of a site investigation campaign ;
* Identification and comparative analysis of the project variants and its components for the choice of the optimal dam configuration and, the rationale for choosing the final project parameters ;
* Identification of impacts, challenges and environmental and social constraints with a brief assessment of the projected costs and damages compensation for each option;
* The demarcation to present the delimitation of the sites (corridor of the line, substation site and other infrastructure) and to facilitate their recognition;
* Detailed survey and inventory of all affected properties.

As regards the Feasibility Study and Detailed Design, it includes, among others:

* the preparation and implementation of a field investigations campaign;
* the identification and the preliminary technical design of the variants to be considered at the level of feasibility (at least 3 distinct variants);
* the technical-economic comparison of several variants to justify the choice of the final project parameters by integrating the environmental scoping phase in which the environmental impacts identified by the independent Consultant in charge of the ESIA and the corresponding costs are evaluated in parallel;
* economic, financial, institutional, tariff and sensitivity analyzes;
* the preparation, supervision and analysis of the results of the investigation program required on site;
* the definition and validation of the design for the various hydraulic generation and transmission facilities;
* the preparation of the Schedules of Requirements and cost schedules of the final development;
* identification and analysis of risks that could hinder the implementation and operation of the project and, the proposal of preventive and mitigation measures, where required, to ensure its implementation with optimal time;

The process of selecting consultants is ongoing and studies are due in February 2018, for a period of two years.

* **Preparatory Activities to the Establishment of the Institutional Framework for the Implementation of the WAPP North Core Project**

The Nigeria-Niger-Benin / Togo-Burkina Interconnection Project commonly known as the North Core consists of the construction of a 330 kV interconnection line due to connect the Birni Kebbi substation in Nigeria to Ouaga-East substation in Burkina Faso, passing through Niamey and Zabori in Niger with a tee-off to connect Zabori to Malanville, in Benin. The feasibility studies have demonstrated the technical, economic and financial viability of the project, with a controllable impact on the environment. Technical and Financial Partners have come forward to finance the project. These are the French Development Agency (AFD), the African Development Bank (AfDB), the Islamic Development Bank (IDB), the ECOWAS Bank for Investment and Development (EBID), the World Bank (WB) and the European Union (EU). For its implementation, the countries involved in the project agreed to set up a single entity that will be in charge of the day-to-day management of the project during the construction phase, from the approval of the project by the Donors until construction is complete. Studies for the implementation modalities of this single entity are in progress. The WAPP Secretariat is expected to coordinate the establishment of this framework and the recruitment of the staff of this single entity.

1. **Additional Funding Programme**

Component 2 of the additional funding put in place by the World Bank for the extension of the WAPP Integration and Technical Assistance Program is intended to develop new hydropower projects in Liberia. It has two sub-components:

**Sub-Component 2A: Preparation of Pre investment Studies for New Projects in Liberia.**

1. An optimization study that will include :
	* 1. a survey on national and regional demand to assess the available market for generation projects to be developed;
		2. update of the various hydropower development options in Liberia in order to confirm the priority of developing the hydroelectric potentials of the Saint Paul River, including the additional collection of topographic and socio-environmental data using a LIDAR survey;
		3. the identification of an Optimal Development Plan and associated priority projects (including retention, generation and transmission) through optimal management of the water resources of the Saint-Paul waterfall and an analysis of the possibilities of combining solar with hydro and multicriteria analysis. (with a strong emphasis on socio-environmental aspects)
2. A feasibility study (including complementary geotechnical studies) of selected priority projects approved by Liberian authorities;
3. Assessment of environmental and social measures and preparation of Management Plans: an Environmental and Social Impact Assessment (ESIA) to be developed including an Environmental and Social Management Plan (ESMP) as well as a Resettlement Action Plan (RAP);
4. Options for financial structuring of the project, including opportunities for private investor participation or commercial financing will also be reviewed.

**Sub-Component 2B: Technical Assistance through the Establishment of two Experts Panels and a Capacity Building Programme**.

* 1. Two expert panels will be established under the auspices of WAPP. A technical panel for dams safety and an environmental panel composed of high level international experts to supervise the studies and ensure their compliance with international standards;
	2. A focal team for studies that will provide technical support to the High Level Steering Committee to be established;
	3. Improvement of the institutional framework and capacity building for the stakeholders in Liberia, through adequate training and mentoring training mainly in hydropower, in water management and possibly in solar power.
1. ***Objective***

One of the critical factors in achieving the objectives of this component is the WAPP Secretariat ability to ensure timely and accurate monitoring and coordination of activities as described above, hence the need to provide the Secretariat with qualified human resources.

As part of the World Bank's Assistance Programme for the preparation and development of hydropower projects in connection with the CLSG line as well as support to the WAPP General Secretariat for carrying out activities to enable integration of its electrical system, it is expected the recruitment of a Resident Technical Projects Coordinator to strengthen the WAPP General Secretariat capacity, under a contract of Technical Assistant for a period of three (03) years. This Technical Coordinator will provide the necessary technical support to the Implementation Unit of the Assistance Program set up within the WAPP General Secretariat to coordinate all activities of the Program.

These Terms of Reference specify the main services expected from this Coordinator.

1. ***Scope of Services***

The Resident Project Technical Coordinator will perform the mission in accordance with internationally recognized practices and, in full compliance with WAPP and World Bank requirements.

As part of the implementation of the Bank's technical assistance program, the Technical Project Coordinator will be in charge of monitoring and technical coordination of the activities of the technical assistance program, including all of the pre-investment studies of the priority projects identified under the program for timely implementation, in accordance with the work program agreed with the Implementation Unit Coordinator of the World Bank Technical Assistance Program for projects in connection with the Planning, Investment Programming and Environmental Safeguard Department (PIPES) of the WAPP General Secretariat and, any other tasks assigned by the Secretariat.

The scope of services formulates around:

* 1. **Hydropower Projects related to the CLSG Projects**

The main activities of the Projects Coordinator will be:

* Assisting in identifying studies to be carried out under the development of hydropower projects, in connection with the CLSG Project;
* Supervising the preparation of Terms of Reference (ToR) for the recruitment of Consultants with the view to carrying out the pre investment studies and ensuring their coordination;
* Supervising the preparation of Terms of Reference for the recruitment of the panels;
* Coordinating the establishment of the focal team in Liberia and supervise it ;
* Participating in the selection process of panels and Consultants in charge of conducting pre-investment studies;
* Reviewing reports submitted by consultants and preparing related comments, in collaboration with panels experts and the focal team;
* Following up on the panels experts’ and consultants’ contracts;
* Coordinating the dissemination of the various reports of pre-investment studies and the collection of comments from stakeholders including panels;
* Updating indicative project development schedules;
* Ensuring follow-up and timely delivery of pre-investment study reports;
* Organizing feedback meetings and coordinating the participation of all stakeholders involved in the projects;
* Contributing to the preparation of quarterly work programs and progress reports and their submission to the WAPP Secretariat in the prescribed formats, for subsequent submission to the World Bank
* Developing other one-off activity reports on the status of projects under study;
* Organizing and actively participating in projects monitoring and coordination meetings during the preparation phase;
* Providing support to the project Implementation Unit Coordinator to prepare non-objection requests;
* Any such tasks that might be assigned by the WAPP General Secretariat under the implementation of the assistance programme.
	1. **Preparation of the North Core**

The main activities of the Projects Coordinator will be:

* Coordinating the preparatory activities right through to signing and enforcement of the funding agreements for the North Core Project;
* Ensuring follow-up of the consultants’ contracts;
* Updating indicative project development schedules;
* Monitoring and delivering consultants' reports on time;
* Preparing Terms of Reference for the North Core Project Management Unit Staff;
* Preparing the Terms of Reference of the Staff Recruitment Agency for the Project Management Unit;
* Participating in the recruitment process of the Project Management Unit staff;
* Organizing feedback meetings and coordinating the participation of all stakeholders in the North Core project;
* Coordinating information and data collection relating to the studies in the involved countries and/or utilities;
* Updating information relating to the status of studies in the WAPP database as well as the funding and sources requirements;
* Contributing to the preparation of quarterly work programs and progress reports and their submission to the WAPP General Secretariat in the formats prescribed, for subsequent transmission to the World Bank;
* Developing one-off activity reports on the progress of the project;
* Organizing and actively participating in project monitoring and coordination meetings;
* Preparing and delivering presentations on the status of the project;
* Providing support to the project Implementation Unit Coordinator to prepare non-objection requests;
* Any other tasks that may be assigned by the WAPP General Secretariat as part of the implementation of this project.
	1. **Additional Activities for Other WAPP Projects.**

In this context, the Technical Coordinator will be in charge of coordinating all the activities of any other projects that may be assigned to him by the WAPP General Secretariat. It will have for main tasks:

* Supervising the preparation of Terms of Reference (ToR) for the recruitment of the Consultants in charge of carrying out the pre investment studies and ensuring their coordination;
* Taking part in the selection process of the Consultants in charge of carrying out the pre investment studies ;
* Coordinating the information and data collection relating to the pre investment studies in the involved countries and/or utilities;
* Reviewing reports submitted by consultants and preparing related comments, in collaboration with panels experts and the focal team;
* Following up on the consultants ’contracts;
* Coordinating the dissemination of the various reports of pre-investment studies and the collection of comments from stakeholders including panels;
* Updating indicative project development schedules;
* Ensuring follow-up and timely delivery of pre-investment study reports;
* Organizing feedback meetings and coordinating the participation of all stakeholders involved in the projects;
* Updating information on the status of studies in the WAPP database as well as funding and sources requirements;
* Ensuring the preparation of quarterly work programs and progress reports and their submission to the WAPP Secretariat in prescribed formats, for subsequent transmission to the World Bank;
* Developing one-off activity reports on the status of projects under study;
* Organizing and actively participating in projects monitoring and coordination meetings during the preparation phase;
* Preparing and delivering presentations on the status of WAPP priority projects;
* Any other duties that might be assigned by the WAPP General Secretariat under the implementation of the priority projects;
1. ***Expected Results***

The scope of services provided by the Technical Project Coordinator includes the preparation and timely submission of quality reports and documents, written in English as well as in French.

The Resident Project Technical Coordinator shall provide:

1. Initial Report:

The Technical Project Coordinator must submit an initial report within 4 weeks from the date of entry into service in Cotonou, which must contain, among other things, the work plan, the methodology and the timetable for carrying out the mission.

1. Quarterly Reports:

The Technical Project Coordinator will submit quarterly reports for the duration of the assignment. These reports should summarize the main tasks performed during the reporting period, the milestones achieved in completing the mission, and the completion rate of the mission. The financial data shall include the Project Coordinator's photocopies of invoices and financial reports detailing all expenses incurred, including the Project Coordinator's daily rates of remuneration, hours worked and other direct costs. All documents prepared by the Project Technical Coordinator within the scope of the assignment (including annotated presentations and comments to the reports) must be included as an appendix to each Quarterly Report. The said reports must be written in English and French and submitted by the 10th day of the month following the end of each quarter, at the latest.

1. Final Report:

At the end of the assignment, the Resident Project Technical Coordinator will be required to submit a full report detailing, among other things, the activities undertaken during the mission period, the inputs and outputs, the expected results and the deliverables required by the WAPP General Secretariat and the Funding Agency. The submission and approval of this report will be the prerequisites for the disbursement of his last payment for the assignment.

In addition, the implementation of the activities mentioned in the above-mentioned scope of services is an integral part of the expected results of the Resident Project Technical Coordinator.

1. ***Reporting Requirements***

The Project Coordinator will be accountable to the WAPP Secretary General, and will work closely with the WAPP Secretariat's Planning, Investment Programming and Environmental Safeguard Department and the Implementation Unit Coordinator of the World Bank Technical Assistance Program. During the execution of the assignment, the Resident Project Technical Coordinator will liaise with WAPP member utilities, Ministries of Energy and Funding Agencies. The assignment being financed by the World Bank, the relevant World Bank requirements shall be applicable in this regard.

1. ***Required Qualifications***

Education :

Engineer's degree or a Master's degree in electrical engineering is required. A Master in Project Management would be an asset. Familiarity or experience in the environmental and social aspects of the projects would also be an added advantage.

Experience:

Minimum seven (07) years of experience in the field of electrical systems planning and a good knowledge of the procurement procedures of international lenders. The applicant must have:

* Proven skills in the management and/or coordination of infrastructure projects, preferably electrical and regional;
* Good knowledge in the preparation of Funding Requests and Project Documentation including Terms of Reference for pre-investment studies;
* Good skills in estimating the financial costs of power infrastructure projects;
* Ability to work with short deadlines in a challenging environment;
* The ability to work effectively in a team, in a multinational environment with minimum supervision;
* Excellent negotiation and conciliation skills;
* Good knowledge of Microsoft Office IT tools and applications, including the following computer programs: Excel, Word, PowerPoint, Project, E-mail and the Internet;
* Good oral and written communication skills with the ability to provide feedback in a precise and concise manner;
* Good organizational skills with abilities to effectively plan workload and perform multiple tasks simultaneously;
* Excellent oral and written command of English and French.

The Resident Project Coordinator will be based in Cotonou (Benin) and will travel frequently within the sub-region. The work may occasionally require weekends and/or late nights work.