

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: PIDA11103

Project Name	OMVG Interconnection Project (P146830)
Region	AFRICA
Country	Africa
Sector(s)	Transmission and Distribution of Electricity (100%)
Theme(s)	Regional integration (70%), Infrastructure services for private sector development (15%), Climate change (15%)
Lending Instrument	Investment Project Financing
Project ID	P146830
Borrower(s)	The Republic of Guinea, The Republic of Gambia, The Republic of Guinea Bissau, The Republic of Senegal
Implementing Agency	OMVG
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	11-Feb-2015
Date PID Approved/Disclosed	18-Feb-2015
Estimated Date of Appraisal Completion	13-Feb-2015
Estimated Date of Board Approval	30-Apr-2015
Decision	

I. Project Context

Country Context

Regional integration is critical to greater shared prosperity and ending poverty in the 15 member states of the Economic Community of West African States (ECOWAS). The ECOWAS states occupy some five million square kilometers and are home to about 300 million people. They had an average economic growth of 6 percent per year during 2008-2012. Average per capita income is approximately US\$2,000 per year (current GDP per capita), and half the population lives in poverty as defined by those living on US\$2 per day. A substantial reduction of poverty will require sustained economic growth rates. This in turn will require massive investments to make up for current deficits in infrastructure. The high cost of infrastructure, particularly in some of the smaller countries, has been a barrier to development.

The Gambia, Guinea, Guinea-Bissau, and Senegal form the Gambia River Basin and have a combined population of 29 million and GDP of US\$23 billion. The Gambia River Basin Development Organization (OMVG / Organisation pour la Mise en Valeur du fleuve Gambie) was created in 1978 by a convention signed between Senegal and The Gambia to manage the river and its basin and to foster its economic development. Guinea and Guinea-Bissau became members in

1981 and 1983, respectively.

Underscoring its vulnerability to external shocks and lack of diversification, real GDP growth in The Gambia is projected to contract by close to 1 percent in 2014. This reflects sharp contractions in agricultural production, tied to poor rains, and in tourism receipts, tied to the outbreak of Ebola in neighboring countries that has discouraged travel to the wider sub-region. The 2014 downturn follows a modest recovery in 2012-2013, when GDP growth averaged 5.1 percent, in the aftermath of the 4.3 percent contraction in 2011 due to severe Sahelian drought. The Gambia is heavily dependent on rain-fed agricultural production, food imports, tourism receipts, and remittances inflows. Gambian transit and re-export trade activity has been hampered over the past decade by gains in competitiveness in neighboring countries and the impacts of the most recent political crises in Mali and Guinea-Bissau. The Gambian population stood at 1.8 million in 2013, and the GDP per capita was US\$494. Overall poverty rates declined from 58 percent in 2003 to 48.4 percent in 2010, and education coverage and quality improved.

A fragile economy, Guinea is in the middle of a delicate transition towards greater political and macroeconomic stability. Guinea remains one of the poorest countries in the world with a per capita GDP of about US\$492 in 2013 and a population of 11.7 million. After years of instability, political isolation and military rule, Guinea has made considerable progress in restoring normalcy over the last four years. Guinea adopted a new constitution and fully re-integrated into the international community. Macro-economic stability was restored through prudent monetary and fiscal policies, and debt sustainability dramatically improved after the Highly Indebted Poor Countries (HIPC) completion point in 2012. Economic growth has increased, averaging close to 3 percent from 2010 to 2014. However, poverty has worsened in recent years with the 2012 Limited Poverty Evaluation Survey showing that 55 percent of the population is considered to be poor, compared with 53 percent in 2007 and 40 percent in 1995. Building on its vast endowment of natural resources (including both mining and hydropower), Guinea has now embarked on a path of long term development.

In Guinea-Bissau, elections restored constitutional order in early 2014, following a military coup in April 2012, creating the conditions for a resumption of economic growth. The military coup plunged the economy of Guinea-Bissau into recession, as donors suspended their operations and the incoming government mismanaged the cashew campaigns of 2012 and 2013. The cashew sector accounts for the vast majority of production and employment and employs most of the country's poor—where poverty at the national poverty line exceeds 70 percent. The return to democracy in 2014 was accompanied both by a better cashew campaign and the resumption of donor support, improving the economic outlook for this poor economy with a GNI per capita of US\$520 (Atlas method) and a population of about 1.7 million.

Senegal aspires to be an emerging economy by 2035, but has been in a low-growth equilibrium since 2006. With a population of about 14 million in 2013, a poverty rate of 46.7 percent in 2011, and a per capita GDP of US\$1,072 in 2013, Senegal has not shared the rapid growth experienced by many other SSA countries over the last decade. Compared to an average growth rate of 6 percent in the rest of SSA, growth in Senegal averaged only 4 percent between 2000 and 2010, with population growth at 2.5 percent. Senegal's democratic tradition has been strengthened by the March 2012 presidential elections.

The Ebola epidemic has had a significant negative impact and threatens to hinder prospects to

reduce poverty and macroeconomic stability in the sub region. Ebola has already had serious adverse economic effects on Guinea in particular, straining the country's healthcare system and generating huge fiscal pressures as revenues have contracted and expenditures have increased. Economic growth has been revised downward from 4.5 percent to 0.5 percent of GDP in 2014. Senegal has faced one Ebola case, but has been able to contain the disease. All four countries have felt the impact of the disease, with the tourism industry in Guinea-Bissau also being impacted. If not contained, Ebola could have a serious adverse impact on economic performance over the medium term and lead to pronounced economic contraction in 2015 and onward.

Sectoral and institutional Context

Despite significant energy resources, West African countries continue to have low rates of electricity access. Energy resources in West Africa are concentrated in a few countries. 170 million people in ECOWAS countries lack access to electricity. ECOWAS countries are also among the lowest in the world in terms of electricity consumption, at approximately 160 kWh per capita. Power outages are frequent in many countries leading the private sector to invest widely in backstop generation or absorb serious losses in sales.

Regional integration of the power systems in ECOWAS will facilitate large-scale development of the region's cost-effective and clean hydropower and natural gas resources. Guinea's 6,000 MW of hydropower potential could be a source of sustainable power supply in West Africa. Also, gas along the coast from Cote d'Ivoire to Nigeria and in Mauritania can be converted into power. The cost of producing thermal power using liquid fossil fuels can reach US\$0.50 per kWh compared to US\$0.05-10 per kWh for hydropower and US\$0.15-20 per kWh for gas-to-power generation.

Completion of the OMVG represents a critical step of interconnection of the WAPP network from Nigeria to Senegal by connecting the existing OMVS network to the north and the CLSG network to the east (Figure 1). Much progress has been made on developing the WAPP transmission backbone with many interconnections being finalized or under construction. Once the CLSG interconnector is completed, the networks of Guinea will be connected to the Southern Backbone of Ivory Coast-Togo-Benin-Nigeria. Once the OMVG project is completed, this integration will reach up to Senegal.

The OMVG grid will allow for the transfer of surplus generation from the country/region with lower future generation costs to the system with the higher generation costs. The Gambia, Guinea-Bissau, and Senegal are highly dependent on expensive liquid fuel thermal generation, while Guinea has a large hydropower potential. Aggregating demand from OMVG countries will enable the development of competitively priced power supply capacity through economies of scale.

This is the right time to proceed with the OMVG interconnection. The OMVG interconnection project was originally conceived in the 1980s and several efforts have been made to implement it. Previous efforts have failed due to various factors, including political instability in the sub-region, lack of political consensus, and lack of financing. There is now strong political support for the project and a financing plan that includes sufficient financing from seven donors. A number of generation projects are being constructed so the line does not risk becoming a stranded asset.

While all OMVG countries are currently facing generation deficits this is expected to change in the coming years. The 240MW Kaleta hydro plant in Guinea will come online in 2015. 30 percent of its

generation capacity is reserved for exports to OMVG neighbors and more exports might be possible in the wet season as the Guinean grid cannot absorb full capacity. The Sambangalou hydropower project in Senegal/Guinea is expected to come online in 2020. The OMVG Council of Ministers signed a power sharing agreement for Kaleta and Sambangalou in 2012. Term sheets for Power Purchase Agreements (PPAs) and Transmission Service Agreements (TSAs) have been drafted and are expected to be agreed between ministers in early 2015. Several other projects are expected to come online. The 140 MW Gouina hydropower project in Mali will come on line in 2019. Several projects are under development in Senegal. The confirmation of the financing for the OMVG interconnector will spur regional power development, especially hydropower development in Guinea, by providing visibility of off taker markets for independent power producers (IPPs)

The power sector in Senegal is relatively advanced but suffers from financial shortfalls, while the power sector in The Gambia, Guinea, and Guinea-Bissau is underdeveloped. The economies of all four countries have been held back by a power infrastructure deficit. Governance challenges have also impeded economic growth necessary to reduce poverty in a sustainable manner.

II. Proposed Development Objectives

The project developmental objective is to enable electricity trade between Senegal, Guinea, Guinea-Bissau and The Gambia.

III. Project Description

Component Name

Component 1: Extension of WAPP transmission network – OMVG Interconnection

Comments (optional)

(i) Sub-Component 1.1. 225 kV Transmission lines (Project Cost: \$425.7 million, IDA credit \$146 million). It involves the construction of 1,667km of 225 kV transmission network capable of handling 800 MW. IDA credit will finance the construction of 567km of 225 kV transmission lines interconnecting the electrical networks of the four countries of the OMVG.

(ii) Sub-Component 1.2. Substations (Project Cost: \$205.4 million, IDA credit \$23 million). The IDA credit involves the engineering and construction of two substations in Guinea-Bissau.

Component Name

Component 2: Technical Assistance to OMVG Secretariat

Comments (optional)

(i) Sub-Component 2.1. Project Management (Project Cost: \$100.6 million, IDA credit \$11 million). IDA credit will provide financing to retain an experienced project management firm that will manage the Project Management Unit on behalf of OMVG (ATMO - Assistance Technique a la Maîtrise d'Ouvrage déléguée). This sub-component will also provide financing for internal audits.

(ii) Sub-Component 2.2. Operations and Maintenance support to OMVG Transmission Company (Project \$20 million, IDA Credit \$20 million).

IV. Financing (in USD Million)

Total Project Cost:	752.00	Total Bank Financing:	200.00
Financing Gap:	0.00		

For Loans/Credits/Others	Amount
BORROWER/RECIPIENT	4.00
International Development Association (IDA)	200.00
African Development Bank	145.00
EC European Investment Bank	114.00
FRANCE Govt. of [MOFA and AFD (C2D)]	50.00
Islamic Development Bank	125.00
GERMANY KREDITANSTALT FUR WIEDERAUFBAU (KFW)	34.00
West African Development Bank	80.00
Total	752.00

V. Implementation

A monitoring and advisory committee will be established and will be responsible for the overall strategic guidance and oversight of the project. The OMVG through its Executive Secretariat will be responsible for project implementation, as set out in resolution no 5/CM/35/B/G adopted by the OMVG Council of Ministers on August 2, 2008 in Banjul. The OMVG Executive Secretariat will carry out project implementation (technical, fiduciary and safeguards aspects) through a project management unit (PMU) that will be established under the Secretariat with the support of the project. The PMU will be supported by an owner's engineer on technical aspects and by national and local monitoring committees for the purposes of facilitating, monitoring and supervising implementation activities on the ground, in particular monitoring the implementation of the ESMP.

Each State will sign a Financing Agreement with the World Bank for an amount that corresponds to the total in Table xx. Each State will on-lend the total amount to OMVG on the same terms on which it has borrowed from the World Bank. Financing Agreements will also be signed between each state and other relevant FTPs. A Subsidiary Agreement between each State and the OMVG will set out the on-lending terms and the obligations of both parties relative to project implementation. The OMVG and the Bank will sign a Project Agreement setting forth the obligations of the parties to implement the project. Under its constitutive documents, OMVG is legally authorized to enter into contracts.

In addition to resolution no 5/CM/35/B/G, during its 40th ordinary session held in November 2013 in Conakry, the Council of Ministers took a decision authorize the OMVG Executive Secretariat in collaboration with member States and TFPs, to establish the monitoring and advisory committee, which will serve as project Steering Committee, national monitoring committees and local coordination and monitoring committees.

Monitoring and Advisory Committee: This Committee will serve as the project steering committee. It will have responsibility for strategic guidance and oversight of the project and will play a central role in the coordination, monitoring and orientation of project activities. It will comprise fifteen (15) members representing various project stakeholders as follows: the OMVG Executive Secretariat (Chair), heads of national OMVG units (04), national energy directorates (04), national electricity companies (04), WAPP (01), and a representative of NGOs engaged in the environmental and social sectors (01). The secretariat of this committee will be assumed by the Coordinator of the PMU. The Committee will meet whenever necessary but at least semi-annually.

Project Management Unit. A Project Management Unit (PMU) will be established within the OMVG and will comprise of staff skilled to carry out the technical, fiduciary and safeguards aspects of the project. To strengthen OMVG's project management capacity, an experienced project management firm (ATMO – Assistance Technique a la Maîtrise d'Ouvrage déléguée), will be retained to manage the PMU. The ATMO will be selected on a competitive process under the Technical Assistance component of the project. The PMU will be responsible for: (i) coordination and planning of the works; (ii) supervision and monitoring/control of the project activities; (iii) administrative and financial management; (iv) procurement activities; (v) implementation of safeguards measures; (vi) performing secretariat duties of the monitoring and advisory committee; and (vii) reporting on progress to FTPs and other relevant stakeholders.

Owner's Engineer. The Owner's Engineer will be responsible for supporting the PMU in supervising the design and installation contracts until handing over and commercial operation of the facilities, certifying contractors' payments, and assisting the OMVG with coordination among all relevant institutions. An engineering firm will be selected through a competitive process.

National Monitoring Committees: Each OMVG Member State will establish a National Monitoring Committee (NMC) that will be responsible for monitoring and supervising activities on the ground, including environmental monitoring, and administrative facilitation. Each committee shall be chaired by the head of the OMVG national unit and shall comprise representatives of: the Ministries in charge of Energy, Local Government, Finance and the Environment as well as the national electricity company. The NMCs will be supervised and coordinated by the PMU and provide progress reports to the monitoring and advisory committee on a regular basis.

Local Monitoring and Coordination Committees: Under the authority of NMCs, Local Monitoring Coordination Committee (LMCCs) will be created in each local government unit affected by the project. The purpose of the LMCCs will be to monitor implementation of field activities including the ESMP.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	x	
Natural Habitats OP/BP 4.04	x	
Forests OP/BP 4.36	x	
Pest Management OP 4.09		x
Physical Cultural Resources OP/BP 4.11	x	
Indigenous Peoples OP/BP 4.10		x
Involuntary Resettlement OP/BP 4.12	x	
Safety of Dams OP/BP 4.37		x
Projects on International Waterways OP/BP 7.50		x
Projects in Disputed Areas OP/BP 7.60		x

Comments (optional)

VII. Contact point

World Bank

Contact: Pedro E. Sanchez
Title: Lead Energy Specialist
Tel: 458-5711
Email: psanchez2@worldbank.org

Borrower/Client/Recipient

Name: The Republic of Guinea
Contact:
Title:
Tel:
Email:

Name: The Republic of Gambia
Contact:
Title:
Tel:
Email:

Name: The Republic of Guinea Bissau
Contact:
Title:
Tel:
Email:

Name: The Republic of Senegal
Contact:
Title:
Tel:
Email:

Implementing Agencies

Name: OMVG
Contact: Justino Vieira
Title: Executive Secretary
Tel: 221338895100
Email: jvanska@omvg.sn

VIII. For more information contact:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Web: <http://www.worldbank.org/infoshop>