

Integrated Safeguards Data Sheet (Initial)

Report No: AC508

Section I - Basic Information

Date ISDS Prepared/Updated: 12/17/2003

A. Basic Project Data (from PDS)

I.A.1. Project Statistics

Country: AFRICA	Project ID: P082502
Project: [3W] West African Gas Pipeline	Task Team Leader: Michel E. Layec
Authorized to Appraise Date: January 31, 2004	IBRD Amount (\$m):
Bank Approval: July 1, 2004	IDA Amount (\$m): 60.00 IDA GUARANTEE: 50
Managing Unit: AFTEG	Sector: Power (80%); Oil and gas (20%)
Guarantee: [] Partial Credit [X] Partial Risk	Theme: Regional integration (P)
Status: Lending	

I.A.2. Project Objectives (From PDS):

- (a) to improve the competitiveness of the energy sectors in Ghana, Benin, and Togo by promoting: (i) the use of cheaper and environmentally cleaner gas from Nigeria in lieu of solid and liquid fuels for power generation and other industrial, commercial, and domestic uses; and (ii) reforms including a modern, institutional legal and regulatory framework that facilitates private sector participation in the energy sector; and
- (b) to foster regional economic and political integration that would support economic growth, and in particular the development of the West Africa electricity market.

I.A.3. Project Description (From PDS):

The **West African Gas Pipeline (WAGP or the Project)** is a regional energy infrastructure project for West Africa.

The Project includes construction of a new high pressure natural gas pipeline, which will supply natural gas from Nigeria, to markets in Benin, Ghana, and Togo, by a newly created entity called **West African Gas Pipeline Company Limited (WAPCo)**, a Bermuda corporation.

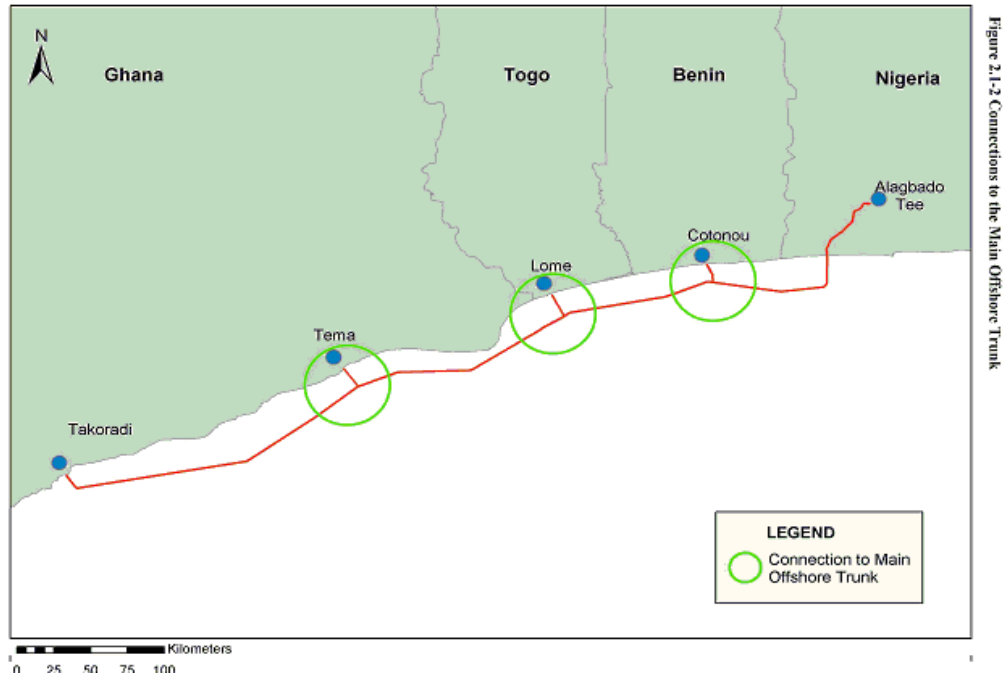


Figure 2.1-2 Connections to the Main Offshore Trunk

The gas to be transported in the new WAPCo pipeline will be produced and processed in the Niger Delta area in south eastern Nigeria; the gas will be primarily associated gas from oil production that previously would have been flared or vented to the atmosphere. From there, it will be transported via an existing high pressure gas pipeline, the Escravos-Lagos Pipeline System (**ELPS**), to the existing terminus of that system at Alagbado near Lagos, Nigeria, where the new WAPCo pipeline will commence. The new WAPCo pipeline thus begins physically at the Alagbado T-junction in Ota Division of Ogun State near Lagos. The Project is one of many customers of the Niger Delta producers, receiving the gas it transports from the ELPS system.

From that point, the new WAPCo pipeline will run about 56 kilometres onshore, to the Nigerian coast, and from there straight out to sea. From there it will run in a westerly direction roughly parallel to the coast, between about 15 and 20 kilometres offshore, in water depths between 26 and 70 metres. The initial construction of the new WAPCo pipeline will terminate at Aboadze in western Ghana, the site of the Takoradi Power Station. The total length of the new pipeline will be approximately 690 km, 620 kms of which is being built offshore.

Lateral pipelines will be laid, to permit natural gas to be delivered along the way, at regulation and metering stations to be situated at landing points at Cotonou in Benin, Lomé in Togo, and Tema (near Accra) in Ghana. Once they make landfall, these lateral lines traverse approximately 4 km in Cotonou (with another 9.5 km of low pressure "link line" downstream of the regulating and metering station), 1 km in Lomé (with another 0.5 km of low pressure "link line" downstream of the regulating and metering station), 1 km at Tema, and about 300 meters at the Takoradi Power Station.

The estimated initial construction cost of the new WAPCo pipeline is about US\$ 450 million, and prior to commencing construction the sponsors of the Project will have spent about \$70 million, for a total of about US\$520 million. The final cost will be determined via a competitive bidding process. The cost of the several stages of expansion to achieve maximum capacity will be approximately US\$150 million. An

investment decision to construct the new WAPCo pipeline is expected in 2004. This would lead to pipeline start-up in mid 2005.

The new WAPCo pipeline is expected to be a 20-inch lined pipeline (this will depend on final costings to be derived from a competitive bidding process, presently underway). The initial installed throughput capacity of the pipeline is expected to be about 150 MMScf/day. In addition, the pipeline will be sized to cater for expansion to meet anticipated future growth in demand, up to a maximum capacity of approximately 450 MMScf/day. The pipeline size will be confirmed following the completion of the competitive bidding process on the basis of overall minimum transportation cost (using the concept of the weighted average tariff detailed in the International Project Agreement) and other aspects including operational considerations.

The development plan envisages a compression station being constructed at Lagos Beach, the last point where the pipeline is onshore in Nigeria before heading offshore. This compression station will subsequently be expanded as the pipeline capacity is increased in future years to meet additional demand. The compression installed initially will be approximately 2 x 12,500 HP centrifugal units (one unit as 100% standby). This capacity will be capable of being increased by adding 4 additional 12,500 HP units in future years to gain the ultimate capacity of about 450 MMScf/day.

Ownership of the new Pipeline System

To date, WAPCo has been sponsored by a six-company consortium (the **Sponsors**) which in August 1999 was mandated by the Governments of Benin, Ghana, Nigeria, and Togo to develop the new pipeline. Chevron Nigeria Limited, the Nigerian affiliate of ChevronTexaco Corporation, is the managing sponsor of the Project.

A comprehensive shareholders agreement for WAPCo has been executed, under which each member has ownership entitlements in WAPCo. Final ownership of WAPCo will depend on the participants making the necessary capital contributions which are provided for in that agreement, but at this stage the following corporations (or their respective affiliates) are expected to be the participants in WAPCo in the following percentages:

ChevronTexaco:	36.7%
Nigerian National Petroleum Corporation:	25.0%
Shell Oil Company:	18.0%
Volta River Authority:	16.3%
Societe Beninoise de Gaz SA:	2.0%
Societe Togolaise de Gaz SA:	2.0%

The latter two companies are two small companies based respectively in Benin and Togo, which are expected to help develop local distribution systems for gas transported in the new WAPCo pipeline.

Gas Markets

The initial (foundation) market for gas transported by the new WAPCo pipeline is the existing crude-oil-fired Takoradi Power Station in Ghana, plus two small existing liquid fuel power stations in Cotonou and Lomé. Substantial growth in the market for gas is projected, with several additional new power generation projects proposed in Ghana, Togo, and Benin. There are also opportunities to develop new industries in the region that would use natural gas for heat, and for the conversion of existing plants which presently use other fuel sources.

I.A.4. Project Location: (Geographic location, information about the key environmental and social characteristics of the area and population likely to be affected, and proximity to any protected areas, or sites or

critical natural habitats, or any other culturally or socially sensitive areas.)

See description above.

B. Check Environmental Classification: A (Full Assessment)

Comments:

C. Safeguard Policies Triggered (from PDS)

(click on  for a detailed description *or* click on the policy number for a brief description)

Policy	Triggered
Environmental Assessment (OP 4.01, BP 4.01, GP 4.01)	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> TBD
Natural Habitats (OP 4.04, BP 4.04, GP 4.04)	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> TBD
Forestry (OP 4.36, GP 4.36)	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> TBD
Pest Management (OP 4.09)	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> TBD
Cultural Property (OPN 11.03)	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> TBD
Indigenous Peoples (OD 4.20)	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> TBD
Involuntary Resettlement (OP/BP 4.12)	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> TBD
Safety of Dams (OP 4.37, BP 4.37)	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> TBD
Projects in International Waters (OP 7.50, BP 7.50, GP 7.50)	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> TBD
Projects in Disputed Areas (OP 7.60, BP 7.60, GP 7.60)*	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> TBD

Section II - Key Safeguard Issues and Their Management

D. Summary of Key Safeguard Issues. Please fill in all relevant questions. If information is not available, describe steps to be taken to obtain necessary data.

II.D.1a. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts.

Impacts include a variety of potential impacts on the terrestrial and marine ecosystems traversed by the pipeline. Alternatives that have been studied include (a) onshore routing of the pipeline, (b) power generation in Nigeria with electric transmission to the other countries, and (c) continuation of oil-fired generation in Ghana, Togo, and Benin (no pipeline or enhanced electric transmission).

To address the issues, environmental experts have been engaged to do a major set of studies including those for OP 4.01 and OP 4.12. The studies include:

- Environmental Impact Assessments
- Resettlement Action Plans

Large scale, significant, and/or irreversible impacts will be determined by the experts.

II.D.1b. Describe any potential cumulative impacts due to application of more than one safeguard policy or due to multiple project component.

TBD

II.D.1c Describe any potential long term impacts due to anticipated future activities in the project area.

The Project is expected to generate significant long-term positive impacts on air quality as a result of reductions in gas flaring and venting in Nigeria and from fuel switching from Bonny light crude and jet fuel to natural gas in Ghana, Togo, and Benin. No long-term adverse impacts are expected, but the EA will include examination of possible long-term impacts caused by or associated with the pipeline.

II.D.2. In light of 1, describe the proposed treatment of alternatives (if required)

See II.D.1a above for alternatives study.

II.D.3. Describe arrangement for the borrower to address safeguard issues

A Category A Environmental Assessment to Bank standards under OP 4.01 is being undertaken by ICF Consulting Group, Inc, under contract with WAPCo. The Bank's safeguards specialists have been fully engaged in the process and have provided detailed guidance and comments to the consultants and sponsors. In addition, Nexant Limited, under a contract with USAID, is assisting the four States in ensuring environmental compliance.

A portion of the new pipeline in Nigeria, from the interface near Lagos to the ocean, will require some resettlement in the right-of-way although physical relocation of affected people is expected to be low. When the final route is determined, a Resettlement Action Plan (RAP) done to Bank standards under OP 4.12 will be submitted to and agreed by the Bank, and will be agreed with the Government of Nigeria. RAPs will also be written for Benin, Togo, and Ghana (Tema only) corridors.

As the new pipeline will cross international waterways, OP 7.50 is triggered. It has been determined that formal notification is not necessary because all four riparian states are party to the Treaty implementing WAGP. Environmental aspects of the marine pipeline will be fully covered in the EA.

The EA will ascertain whether policy on Natural Habitats (OP 4.04) is applicable. Under the policy on Cultural Properties (OPN 11.03), a survey is being carried out in Nigeria to determine whether there are significant cultural property issues along the pipeline corridor. A report of findings will be part of the EA.

II.D.4. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

A consultation process has been agreed with the Sponsors that involves on-site meetings in each country with affected parties from the government partners to the village and town families who may be affected. The final draft Regional EA and each respective country-specific EA and RAP will be placed in public locations in the four countries (TBD), as well as the Bank's InfoShop, in compliance with the Bank's policy on disclosure.

E. Safeguards Classification (select in SAP). Category is determined by the highest impact in any policy. Or on basis of cumulative impacts from multiple safeguards. Whenever an individual safeguard policy is triggered the provisions of that policy apply.

- S1. – Significant, cumulative and/or irreversible impacts; or significant technical and institutional risks in management of one or more safeguard areas
- S2. – One or more safeguard policies are triggered, but effects are limited in their impact and are technically and institutionally manageable
- S3. – No safeguard issues

- [] SF. – Financial intermediary projects, social development funds, community driven development or similar projects which require a safeguard framework or programmatic approach to address safeguard issues.

F. Disclosure Requirements

<i>Environmental Assessment/Analysis/Management Plan:</i>	<u>Expected</u>	<u>Actual</u>
Date of receipt by the Bank	12/31/2003	
Date of “in-country” disclosure	1/30/2004	
Date of submission to InfoShop	1/30/2004	
Date of distributing the Exec. Summary of the EA to the Executive Directors (<i>For category A projects</i>)	1/30/2004	
<i>Resettlement Action Plan/Framework:</i>	<u>Expected</u>	<u>Actual</u>
Date of receipt by the Bank	1/15/2004	
Date of “in-country” disclosure	1/30/2004	
Date of submission to InfoShop	1/30/2004	
<i>Indigenous Peoples Development Plan/Framework:</i>	<u>Expected</u>	<u>Actual</u>
Date of receipt by the Bank	Not Applicable	Not Applicable
Date of “in-country” disclosure	Not Applicable	Not Applicable
Date of submission to InfoShop	Not Applicable	Not Applicable
<i>Pest Management Plan:</i>	<u>Expected</u>	<u>Actual</u>
Date of receipt by the Bank	Not Applicable	Not Applicable
Date of “in-country” disclosure	Not Applicable	Not Applicable
Date of submission to InfoShop	Not Applicable	Not Applicable
<i>Dam Safety Management Plan:</i>	<u>Expected</u>	<u>Actual</u>
Date of receipt by the Bank	Not Applicable	Not Applicable
Date of “in-country” disclosure	Not Applicable	Not Applicable
Date of submission to InfoShop	Not Applicable	Not Applicable

If in-country disclosure of any of the above documents is not expected, please explain why.

Signed and submitted by

	<u>Name</u>	<u>Date</u>
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Approved by:

	<u>Name</u>	<u>Date</u>
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Sector Manager	Yusupha B. Crookes	12/2/2003