**REQUEST FOR PROPOSALS**

**FEASIBILITY STUDY FOR THE**

**REGIONAL RAIL INTEGRATION PROJECT**

Submission Deadline: **4:00 p.m.**

**LOCAL TIME**

**OCTOBER 23, 2009**

Submission Place:

**Mr. Amadou Harouna**
**Directeur de l'Aménagement du Territoire et des Infrastructures**
**Commission de l'UEMOA**
**380 Avenue du Pr. Joseph Ki-Zerbo**
**01 Ouagadougou**
**Burkina Faso**

**Phone: +226 50 31 88 73/ 76**
**Fax : +226 50 31 88 72**

SEALED PROPOSALS SHALL BE CLEARLY MARKED AND RECEIVED PRIOR TO THE TIME AND DATE SPECIFIED ABOVE. PROPOSALS RECEIVED AFTER SAID TIME AND DATE WILL NOT BE ACCEPTED OR CONSIDERED.

## REQUEST FOR PROPOSALS

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## Section 1: INTRODUCTION

The U.S. Trade and Development Agency (USTDA) has provided a grant in the amount of US $750,000 to *Union Économique et Monétaire Ouest-Africaine/* West African Economic and Monetary Union (UEMOA) ("Grantee") in accordance with a grant agreement dated August 5, 2009 ("Grant Agreement"). The Grant Agreement will fund the cost of goods and services required for a feasibility study ("Study") on the proposed Regional Rail Integration Project ("Project") in Mali, Senegal, and Burkina Faso ("Host Countries"). The Grant Agreement is attached at Annex 4 for reference. The Grantee is soliciting technical proposals from qualified U.S. firms to provide expert consulting services to perform the Study.

### 1.1 BACKGROUND SUMMARY

UEMOA and the Economic Community of West African States (ECOWAS) share the goal of providing rail access to alternative seaports from the region's landlocked countries. The ECOWAS Master Plan provided an initial platform from which UEMOA is better able to prioritize new development in the region. In particular, the ECOWAS Master Plan prioritized 17 regional rail connection projects on the basis of technical, operational, economic, financial, institutional, environmental and social considerations. This USTDA-funded Study will focus on the development of the rail line between Bamako, Mali to Mali's southeastern border with Côte d'Ivoire. This Project is a high priority project in the ECOWAS Master Plan as it would connect two existing railways: the Transrail line from Dakar, Senegal to Bamako, Mali, and the Sitarail line from Ouagadougou, Burkina Faso to Abidjan, Côte d'Ivoire, thus providing a reliable transport link for land-locked Burkina Faso and Niger to the Port of Dakar, Senegal.

A background Desk Study is provided for reference in Annex 2.

### 1.2 OBJECTIVE

The objective of the Study is to make recommendations on the technical and economic viability of developing the proposed rail line from Bamako, Mali to Mali's southeastern border with Côte d'Ivoire, as well as its associated costs, design and construction criteria, and implementation plan. The Study will also include a technical assessment on the existing rail line between Dakar, Senegal and Bamako which would be linked to the proposed rail line. The Terms of Reference (TOR) for this Feasibility Study are attached as Annex 5.

### 1.3 PROPOSALS TO BE SUBMITTED

Technical proposals are solicited from interested and qualified U.S. firms. The administrative and technical requirements as detailed throughout the Request for Proposals (RFP) will apply. Specific proposal format and content requirements are detailed in Section 3.

The amount for the contract has been established by a USTDA grant of US $750,000. **The USTDA grant of US $750,000 is a fixed amount. Accordingly, COST will not be a factor in the evaluation and therefore, cost proposals should not be submitted**. Upon detailed evaluation of technical proposals, the Grantee shall select one firm for contract negotiations.

### 1.4 CONTRACT FUNDED BY USTDA

In accordance with the terms and conditions of the Grant Agreement, USTDA has provided a grant in the amount of US $750,000 to the Grantee. The funding provided under the Grant Agreement shall be used to fund the costs of the contract between the Grantee and the U.S. firm selected by the Grantee to perform the TOR. The contract must include certain USTDA Mandatory Contract Clauses relating to nationality, taxes, payment, reporting, and other matters. The USTDA nationality requirements and the USTDA Mandatory Contract Clauses are attached at Annexes 3 and 4, respectively, for reference.

## Section 2: INSTRUCTIONS TO OFFERORS

### 2.1 PROJECT TITLE

The project is called the Regional Rail Integration Project Feasibility Study.

### 2.2 DEFINITIONS

Please note the following definitions of terms as used in this RFP.

The term "Request for Proposals" means this solicitation of a formal technical proposal, including qualifications statement.

The term "Offeror" means the U.S. firm, including any and all subcontractors, which responds to the RFP and submits a formal proposal and which may or may not be successful in being awarded this procurement.

### 2.3 DESK STUDY REPORT

USTDA sponsored a Desk Study to address technical, financial, sociopolitical, environmental and other aspects of the proposed project. A copy of the report is attached at Annex 2 for background information only. Please note that the TOR referenced in the report are included in this RFP as Annex 5.

### 2.4 EXAMINATION OF DOCUMENTS

Offerors should carefully examine this RFP. It will be assumed that Offerors have done such inspection and that through examinations, inquiries and investigation they have become familiarized with local conditions and the nature of problems to be solved during the execution of the Feasibility Study.

Offerors shall address all items as specified in this RFP. Failure to adhere to this format may disqualify an Offeror from further consideration.

Submission of a proposal shall constitute evidence that the Offeror has made all the above mentioned examinations and investigations, and is free of any uncertainty with respect to conditions which would affect the execution and completion of the Feasibility Study.

## 2.5 PROJECT FUNDING SOURCE

The Feasibility Study will be funded under a grant from USTDA. The total amount of the grant is not to exceed US $750,000.

## 2.6 RESPONSIBILITY FOR COSTS

Offeror shall be fully responsible for all costs incurred in the development and submission of the proposal. Neither USTDA nor the Grantee assumes any obligation as a result of the issuance of this RFP, the preparation or submission of a proposal by an Offeror, the evaluation of proposals, final selection or negotiation of a contract.

## 2.7 TAXES

Offerors should submit proposals that note that in accordance with the USTDA Mandatory Contract Clauses, USTDA grant funds shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in the Host Country.

## 2.8 CONFIDENTIALITY

The Grantee will preserve the confidentiality of any business proprietary or confidential information submitted by the Offeror, which is clearly designated as such by the Offeror, to the extent permitted by the laws of the Host Country.

## 2.9 ECONOMY OF PROPOSALS

Proposal documents should be prepared simply and economically, providing a comprehensive yet concise description of the Offeror's capabilities to satisfy the requirements of the RFP. Emphasis should be placed on completeness and clarity of content.

## 2.10 OFFEROR CERTIFICATIONS

The Offeror shall certify (a) that its proposal is genuine and is not made in the interest of, or on behalf of, any undisclosed person, firm, or corporation, and is not submitted in conformity with, and agreement of, any undisclosed group, association, organization, or corporation; (b) that it has not directly or indirectly induced or solicited any other Offeror to put in a false proposal; (c) that it has not solicited or induced any other person, firm, or corporation to refrain from submitting a proposal; and (d) that it has not sought by collusion to obtain for itself any advantage over any other Offeror or over the Grantee or USTDA or any employee thereof.

## 2.11 CONDITIONS REQUIRED FOR PARTICIPATION

Only U.S. firms are eligible to participate in this tender. However, U.S. firms may utilize subcontractors from the Host Country for up to 20 percent of the amount of the USTDA grant for specific services from the TOR identified in the subcontract. USTDA's nationality requirements, including definitions, are detailed in Annex 3. [IF THERE IS A GRANTEE COST SHARE, ADD "Refer to Section 1.4 of this RFP for additional information on the applicability of USTDA's Nationality Requirements."

## 2.12 LANGUAGE OF PROPOSAL

All proposal documents shall be prepared and submitted in English and French.

## 2.13 PROPOSAL SUBMISSION REQUIREMENTS

The **Cover Letter** in the proposal must be addressed to:

**Mr. Amadou Harouna**
**Directeur de l'Aménagement du Territoire et des Infrastructures**
**Commission de l'UEMOA**
**380 Avenue du Pr. Joseph Ki-Zerbo**
**01 Ouagadougou**
**Burkina Faso**

**An Original and eight (8) copies of your proposal must be received at the above address no later than <u>4:00 p.m. local time, on October 23, 2009</u>.**

Proposals may be either sent by mail, overnight courier, or hand-delivered. Whether the proposal is sent by mail, courier or hand-delivered, the Offeror shall be responsible for actual delivery of the proposal to the above address before the deadline. Any proposal received after the deadline will be returned unopened. The Grantee will promptly notify any Offeror if its proposal was received late.

Upon timely receipt, all proposals become the property of the Grantee.

## 2.14 PACKAGING

The original and each copy of the proposal must be sealed to ensure confidentiality of the information. The proposals should be individually wrapped and sealed, and labeled for content including "original" or "copy number x"; the original and eight (8) copies should be collectively wrapped and sealed, and clearly labeled.

Neither USTDA nor the Grantee will be responsible for premature opening of proposals not properly wrapped, sealed and labeled.

## 2.15 AUTHORIZED SIGNATURE

The proposal must contain the signature of a duly authorized officer or agent of the Offeror empowered with the right to bind the Offeror.

## 2.16 EFFECTIVE PERIOD OF PROPOSAL

The proposal shall be binding upon the Offeror for ninety (90) days after the proposal due date, and Offeror may withdraw or modify this proposal at any time prior to the due date upon written request, signed in the same manner and by the same person who signed the original proposal.

## 2.17 EXCEPTIONS

All Offerors agree by their response to this RFP announcement to abide by the procedures set forth herein. No exceptions shall be permitted.

## 2.18 OFFEROR QUALIFICATIONS

As provided in Section 3, Offerors shall submit evidence that they have relevant past experience and have previously delivered advisory, feasibility study and/or other services similar to those required in the TOR, as applicable.

## 2.19 RIGHT TO REJECT PROPOSALS

The Grantee reserves the right to reject any and all proposals.

## 2.20 PRIME CONTRACTOR RESPONSIBILITY

Offerors have the option of subcontracting parts of the services they propose. The Offeror's proposal must include a description of any anticipated subcontracting arrangements, including the name, address, and qualifications of any subcontractors. USTDA nationality provisions apply to the use of subcontractors and are set forth in detail in Annex 3. The successful Offeror shall cause appropriate provisions of its contract, including all of the applicable USTDA Mandatory Contract Clauses, to be inserted in any subcontract funded or partially funded by USTDA grant funds.

## 2.21 AWARD

The Grantee shall make an award resulting from this RFP to the best qualified Offeror, on the basis of the evaluation factors set forth herein. The Grantee reserves the right to reject any and all proposals received and, in all cases, the Grantee will be the judge as to whether a proposal has or has not satisfactorily met the requirements of this RFP.

### 2.22 COMPLETE SERVICES

The successful Offeror shall be required to (a) provide local transportation, office space and secretarial support required to perform the TOR if such support is not provided by the Grantee; (b) provide and perform all necessary labor, supervision and services; and (c) in accordance with best technical and business practice, and in accordance with the requirements, stipulations, provisions and conditions of this RFP and the resultant contract, execute and complete the TOR to the satisfaction of the Grantee and USTDA.

### 2.23 INVOICING AND PAYMENT

Deliverables under the contract shall be delivered on a schedule to be agreed upon in a contract with the Grantee. The Contractor may submit invoices to the designated Grantee Project Director in accordance with a schedule to be negotiated and included in the contract. After the Grantee's approval of each invoice, the Grantee will forward the invoice to USTDA. If all of the requirements of USTDA's Mandatory Contract Clauses are met, USTDA shall make its respective disbursement of the grant funds directly to the U.S. firm in the United States. All payments by USTDA under the Grant Agreement will be made in U.S. currency. Detailed provisions with respect to invoicing and disbursement of grant funds are set forth in the USTDA Mandatory Contract Clauses attached in Annex 4.

## Section 3: PROPOSAL FORMAT AND CONTENT

To expedite proposal review and evaluation, and to assure that each proposal receives the same orderly review, all proposals must follow the format described in this section.

Proposal sections and pages shall be appropriately numbered and the proposal shall include a Table of Contents. Offerors are encouraged to submit concise and clear responses to the RFP. Proposals shall contain all elements of information requested without exception. Instructions regarding the required scope and content are given in this section. The Grantee reserves the right to include any part of the selected proposal in the final contract.

The proposal shall consist of a technical proposal only. A cost proposal is NOT required because the amount for the contract has been established by a USTDA grant of US $750,000, which is a fixed amount.

Offerors shall submit one (1) original and eight (8) copies of the proposal. Proposals received by fax <u>cannot</u> be accepted.

Each proposal must include the following:

Transmittal Letter,
Cover/Title Page,

Table of Contents,
Executive Summary,
Company Information,
Organizational Structure, Management Plan, and Key Personnel,
Technical Approach and Work Plan, and
Experience and Qualifications.

Detailed requirements and directions for the preparation of the proposal are presented below.

## 3.1 EXECUTIVE SUMMARY

An Executive Summary should be prepared describing the major elements of the proposal, including any conclusions, assumptions, and general recommendations the Offeror desires to make. Offerors are requested to make every effort to limit the length of the Executive Summary to no more than five (5) pages.

## 3.2 COMPANY INFORMATION

For convenience, the information required in this Section 3.2 may be submitted in the form attached in Annex 6 hereto.

### 3.2.1 Company Profile

Provide the information listed below relative to the Offeror's firm. If the Offeror is proposing to subcontract some of the proposed work to another firm(s), the information below must be provided for each subcontractor.

1. Name of firm and business address (street address only), including telephone and fax numbers.

2. Year established (include predecessor companies and year(s) established, if appropriate).

3. Type of ownership (e.g. public, private or closely held).

4. If private or closely held company, provide list of shareholders and the percentage of their ownership.

5. List of directors and principal officers (President, Chief Executive Officer, Vice-President(s), Secretary and Treasurer; provide full names including first, middle and last). Please place an asterisk (*) next to the names of those principal officers who will be involved in the Feasibility Study.

6. If Offeror is a subsidiary, indicate if Offeror is a wholly-owned or partially-owned subsidiary. Provide the information requested in items 1 through 5 above for the Offeror's parent(s).

7. Project Manager's name, address, telephone number, e-mail address and fax number .

### 3.2.2 Offeror's Authorized Negotiator

Provide name, title, address, telephone number, e-mail address and fax number of the Offeror's authorized negotiator. The person cited shall be empowered to make binding commitments for the Offeror and its subcontractors, if any.

### 3.2.3 Negotiation Prerequisites

1. Discuss any current or anticipated commitments which may impact the ability of the Offeror or its subcontractors to complete the Feasibility Study as proposed and reflect such impact within the project schedule.

2. Identify any specific information which is needed from the Grantee before commencing contract negotiations.

### 3.2.4 Offeror's Representations

If any of the following representations cannot be made, or if there are exceptions, the Offeror must provide an explanation.

1. Offeror is a corporation *[insert applicable type of entity if not a corporation]* duly organized, validly existing and in good standing under the laws of the State of ______________. The Offeror has all the requisite corporate power and authority to conduct its business as presently conducted, to submit this proposal, and if selected, to execute and deliver a contract to the Grantee for the performance of the Feasibility Study. The Offeror is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment, or ineligible for the award of contracts by any federal or state governmental agency or authority. The Offeror has included, with this proposal, a certified copy of its Articles of Incorporation, and a certificate of good standing issued within one month of the date of its proposal by the State of ___________.

2. Neither the Offeror nor any of its principal officers have, within the three-year period preceding this RFP, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.

3. Neither the Offeror, nor any of its principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 2 above.

4. There are no federal or state tax liens pending against the assets, property or business of the Offeror. The Offeror, has not, within the three-year period preceding this RFP, been

notified of any delinquent federal or state taxes in an amount that exceeds $3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.

5. The Offeror has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law. The Offeror has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.

The selected Offeror shall notify the Grantee and USTDA if any of the representations included in its proposal are no longer true and correct at the time of its entry into a contract with the Grantee. USTDA retains the right to request an updated certificate of good standing from the selected Offeror.

## 3.3 ORGANIZATIONAL STRUCTURE, MANAGEMENT, AND KEY PERSONNEL

Describe the Offeror's proposed project organizational structure. Discuss how the project will be managed including the principal and key staff assignments for this Feasibility Study. Identify the Project Manager who will be the individual responsible for this project. The Project Manager shall have the responsibility and authority to act on behalf of the Offeror in all matters related to the Feasibility Study.

Provide a listing of personnel (including subcontractors) to be engaged in the project, including both U.S. and local subcontractors, with the following information for key staff: position in the project; pertinent experience, curriculum vitae; other relevant information. The Grantee requests that the Offeror's proposed project team include personnel with the following expertise:

- Infrastructure Engineer
- Civil Engineer
- Telecommunications and Railroad Signaling Engineer
- Transportation Economist
- Railway Engineer
- Legal and Institutional Specialist

If subcontractors are to be used, the Offeror shall describe the organizational relationship, if any, between the Offeror and the subcontractor.

A manpower schedule and the level of effort for the project period, by activities and tasks, as detailed under the Technical Approach and Work Plan shall be submitted. A statement confirming the availability of the proposed project manager and key staff over the duration of the project must be included in the proposal.

## 3.4 TECHNICAL APPROACH AND WORK PLAN

Describe in detail the proposed Technical Approach and Work Plan (the "Work Plan"). Discuss the Offeror's methodology for completing the project requirements. Include a brief narrative of the Offeror's methodology for completing the tasks within each activity series. Begin with the information gathering phase and continue through delivery and approval of all required reports. The Grantee requests that the Offeror's work plan include a presentation of the Final Report to the Grantee and other project stakeholders at the Grantee's office in Burkina Faso.

Prepare a detailed schedule of performance that describes all activities and tasks within the Work Plan, including periodic reporting or review points, incremental delivery dates, and other project milestones. The Grantee requests that the Offeror provide a proposed timeline for completing the Feasibility Study.

Based on the Work Plan, and previous project experience, describe any support that the Offeror will require from the Grantee. Detail the amount of staff time required by the Grantee or other participating agencies and any work space or facilities needed to complete the Feasibility Study.

## 3.5 SECTION 5: EXPERIENCE AND QUALIFICATIONS

Provide a discussion of the Offeror's experience and qualifications that are relevant to the objectives and TOR for the Feasibility Study. If a subcontractor(s) is being used, similar information must be provided for the prime and each subcontractor firm proposed for the project. The Offeror shall provide information with respect to relevant experience and qualifications of key staff proposed. The Offeror shall include letters of commitment from the individuals proposed confirming their availability for contract performance.

As many as possible but not more than six (6) relevant and verifiable project references must be provided for the Offeror and any subcontractor, including the following information:

Project name,
Name and address of client (indicate if joint venture),
Client contact person (name/ position/ current phone and fax numbers),
Period of Contract,
Description of services provided,
Dollar amount of Contract, and
Status and comments.

Offerors are strongly encouraged to include in their experience summary primarily those projects that are similar to or larger in scope than the Feasibility Study as described in this RFP.

## Section 4: AWARD CRITERIA

Individual proposals will be initially evaluated by a Procurement Selection Committee of representatives from the Grantee. The Committee will then conduct a final evaluation and completion of ranking of qualified Offerors. The Grantee will notify USTDA of the best qualified Offeror, and upon receipt of USTDA's no-objection letter, the Grantee shall promptly notify all Offerors of the award and negotiate a contract with the best qualified Offeror. If a satisfactory contract cannot be negotiated with the best qualified Offeror, negotiations will be formally terminated. Negotiations may then be undertaken with the second most qualified Offeror and so forth.

The selection of the Contractor will be based on the following criteria:

*Technical Qualifications and Experience of Offering Firm (25 points):* Firm's experience in preparing feasibility studies for national/regional railway development projects including design, route selection, requirements analysis, equipment, operation, workload demand estimation, environmental and social impact, procurement procedures, cost analysis, cost estimating, and development of a capital investment program for similar projects. This should include a demonstrated understanding of international and local standards and practices and an understanding of the requirements of the international development banks who are likely to support the Regional Rail Integration Project.

*Technical Qualifications and Experience of Proposed Personnel (40 points):* Personnel experience in preparing feasibility studies for national/regional railway development projects including design, route selection, requirements analysis, equipment, operation, workload demand estimation, environmental and social impact, procurement procedures, cost analysis, cost estimating, and development of a capital investment program for similar projects. This should include a demonstrated understanding of international and local standards and practices and an understanding of the requirements of the international development banks who are likely to support the Regional Rail Integration Project.

*Work Plan and Methodology (25 points):* Adequacy of the proposed work plan and suggested overall approach in responding to the Terms of Reference. The soundness and thoroughness of the technical approach and work plan detailed in the proposal and the overall quality of the presentation should be evaluated. The proposal should provide an organization chart of key personnel with their qualifications and a staffing schedule for each key activity.

*Regional Experience (10 points):* Firm and personnel familiarity with railway development in West Africa, including local and international regulations and requirements.

Proposals that do not include all requested information may be considered non-responsive.

Price will not be a factor in contractor selection.

# ANNEX 1

Mr. Amadou Harouna; Directeur de l'Aménagement du Territoire et des Infrastructures; Commission de l'UEMOA; 380 Avenue du Pr. Joseph Ki-Zerbo; 01 Ouagadougou; Burkina Faso; Phone: +226 50 31 88 73/ 76; Fax : +226 50 31 88 72

Feasibility Study for the Regional Rail Integration Project

POC John Kusnierek, USTDA, 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901, Tel: (703) 875-4357, Fax: (703) 875-4009. The Grantee, *Union Économique et Monétaire Ouest-Africaine/* West African Economic and Monetary Union (UEMOA), invites submission of qualifications and proposal data (collectively referred to as the "Proposal") from interested U.S. firms which are qualified on the basis of experience and capability to develop a feasibility study for the Regional Rail Integration Project.

The Grantee is seeking a feasibility study to further examine specific recommendations of the recently completed Economic Community of West African States (ECOWAS) Master Plan which recommends the construction of 17 new railway links in West Africa. Specifically, the purpose of this feasibility study is to assist the Grantee in determining the technical and economic viability of developing a proposed rail line from Bamako, Mali to Mali's southeastern border with Côte d'Ivoire, and making recommendations for the upgrade of the existing railway from Bamako, Mali to Dakar, Senegal to which the new rail line would be linked, as well as its associated costs, design and construction criteria, and implementation plan.

The U.S. firm selected will be paid in U.S. dollars from a $750,000 grant to the Grantee from the U.S. Trade and Development Agency (USTDA).

A detailed Request for Proposals (RFP), which includes requirements for the Proposal, the Terms of Reference, and a background definitional mission/desk study report are available from USTDA, at 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901. To request the RFP in PDF format, please go to: https://www.ustda.gov/USTDA/FedBizOpps/RFP/rfpform.asp. Requests for a mailed hardcopy version of the RFP may also be faxed to the IRC, USTDA at 703-875-4009. In the fax, please include your firm's name, contact person, address, and telephone number. Some firms have found that RFP materials sent by U.S. mail do not reach them in time for preparation of an adequate response. Firms that want USTDA to use an overnight delivery service should include the name of the delivery service and your firm's account number in the request for the RFP. Firms that want to send a courier to USTDA to retrieve the RFP should allow one hour after faxing the request to USTDA before scheduling a pick-up. Please note that no telephone requests for the RFP will be honored. Please check your internal fax verification receipt. Because of the large number of RFP requests, USTDA cannot respond to requests for fax verification. Requests for RFPs received before 4:00 PM will be mailed the same day. Requests received after 4:00 PM will be mailed the following day. Please check with your courier and/or mail room before calling USTDA.

Only U.S. firms and individuals may bid on this USTDA financed activity. Interested firms, their subcontractors and employees of all participants must qualify under USTDA's nationality requirements as of the due date for submission of qualifications and proposals and, if selected to carry out the USTDA-financed activity, must continue to meet such requirements throughout the duration of the USTDA-financed activity. All goods and services to be provided by the selected firm shall have their nationality, source and origin in the U.S. or host country. The U.S. firm may use subcontractors from the host country for up to 20 percent of the USTDA grant amount. Details of USTDA's nationality requirements and mandatory contract clauses are also included in the RFP.

Interested U.S. firms should submit their Proposal in English and French directly to the Grantee by **4:00 p.m. local time on October 23, 2009** at the above address. Evaluation criteria for the Proposal are included in the RFP. Price will not be a factor in contractor selection, and therefore, cost proposals should NOT be submitted. The Grantee reserves the right to reject any and/or all Proposals. The Grantee also reserves the right to contract with the selected firm for subsequent work related to the project. The Grantee is not bound to pay for any costs associated with the preparation and submission of Proposals.

# ANNEX 2

# Desk Study

# Final Report

# UEMOA Regional Rail Sector

PROJECT NUMBER: **200410041C**

January 20, 2009

**TUSK FINANCIAL**
**A Division of Tusk, LLC**

1725 I Street, NW, Suite 300
Washington, DC 20006
202-558-6918
Fax 318-5557

This report was funded by the U.S. Trade and Development Agency (USTDA), a foreign assistance agency of the U.S. Government. The opinions, findings, conclusions, or recommendations expressed in this document are those of the author(s) and do not necessarily represent the official position or policies of USTDA.

**Mailing and Delivery Address :** 1000 Wilson Blvd – Suite 1600 Arlington, VA 22209-2131
Phone: 703-875-4357 • Fax: 703-875-4009 • Web site: **www.tda.gov** • email: info@tda.gov

# The U.S. Trade and Development Agency

The U.S. Trade and Development Agency (USTDA) advances economic development and U.S. commercial interests in developing and middle income countries. The agency funds various forms of technical assistance, feasibility studies, training, orientation visits and business workshops that support the development of a modern infrastructure and a fair and open trading environment.

USTDA's strategic use of foreign assistance funds to support sound investment policy and decision-making in host countries creates an enabling environment for trade, investment and sustainable economic development. Operating at the nexus of foreign policy and commerce, USTDA is uniquely positioned to work with U.S. firms and host countries in achieving the agency's trade and development goals. In carrying out its mission, USTDA gives emphasis to economic sectors that may benefit from U.S. exports of goods and services.

**Mailing and Delivery Address :** 1000 Wilson Blvd – Suite 1600 Arlington, VA 22209-2131
Phone: 703-875-4357 • Fax: 703-875-4009 • Web site: www.tda.gov • email: info@tda.gov

## Table of Contents

# 1. Executive Summary

**Background on Desk Study**

The United States Trade and Development Agency ("USTDA") contracted Tusk Financial (the "Consultant") to evaluate via a Desk Study a grant request by the West Africa Economic and Monetary Union's Commission, "UEMOA Commission", for a feasibility study of a new railway link between Bamako, Mali and the border of Cote d'Ivoire (the "Study"). The railway would ultimately reach into Cote d'Ivoire to Ouangolodougou (the Cote d'Ivoire segment being outside of the USTDA supported Study), and linking with the existing railway running from Abidjan in Cote d'Ivoire to Kaya, Burkina-Faso railway. The ~596Km railway segment, and the associated infrastructure, operations, and rolling stock, is hereinafter referred to as the Project. The Project contributes as a catalyst to new business and sustainable growth by improving the competitiveness of freight transport and the transfer of travelers. It aims to facilitate travel with affordable, convenient intercity passenger train service, and to make available competitive transport of goods, particularly container, freight, and bulk traffic along the coastal corridor (Dakar-Abidjan).

The interest by the UEMOA Commission in support for the Project from USTDA has originated in part through an earlier request to USTDA from the UEMOA commission for assistance in funding feasibility studies on various projects under their consideration. The UEMOA commission is the regional agency established to oversee the union of the UEMOA member states and promote various initiatives enhancing integration and the free flow of goods/people within the region, with the ongoing major goal of growing the respective member country economies. The Consultant worked on a USTDA funded Definitional Mission ("USTDA DM") in cooperation with UEMOA which resulted in certain project study recommendations, including railways. Soon thereafter the Economic Community of West African States (ECOWAS) launched a major regional railway study with African Development Bank funding which would overlap with the USTDA DM's identified railway projects. UEMOA opted to defer any USTDA grant support until this new "ECOWAS Study" was completed, and its results could be adapted.

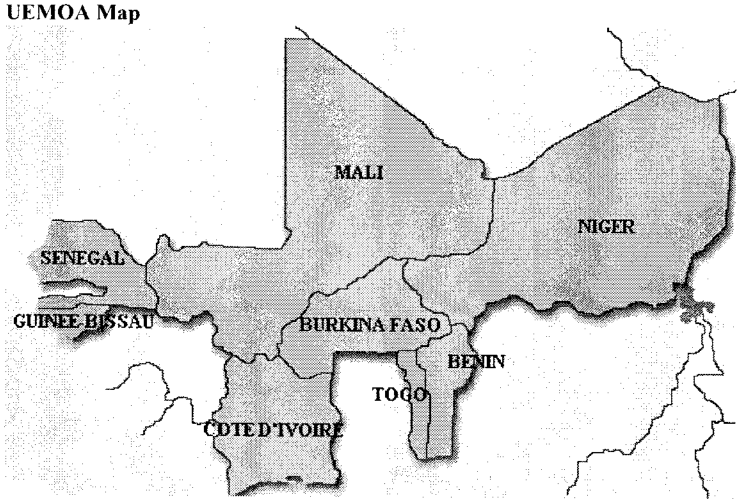
The strategic criterion for the ECOWAS Study "focuses on opening up the landlocked countries, involving regional integration, networking the existing railways, and fostering economic cooperation." The object of the CIMA-UMA Group led ECOWAS study was to analyze each railway interconnection project shown on the ECOWAS Master Plan with a view to establishing an order of priority for implementation, based on preliminary technical feasibility, economic and financial viability, as well as environmental and social impacts, among other. Two of the three railway segments recommended in that USTDA Definitional Mission were analyzed along with 15 other segments as part of the ECOWAS Study, and these were deemed by the CIMA-UMA Group study team executing that study to be in the top three for implementation priority. The Project is a slight variation from the Definitional Mission as the railway will connect to the Abidjan-Ouagadougou railroad (SITARAIL) inside Cote d'Ivoire as opposed to in the city of Bobo-Dioulasso in Burkina Faso.

The Consultant has developed a recommendation on terms of reference for the feasibility study to build upon where the CIMA-UMA Group study left off, and provide the elements needed to allow for the implementation of the Project.

## UEMOA Region (UEMOA)

The West Africa Economic and Monetary Union (UEMOA/WAEMU) was founded in 1994 and includes Benin, Cote d'Ivoire, Guinea Bissau, Senegal and Togo (all coastal) - and the interior countries - Burkina Faso, Mali and Niger. The primary objective for the creation of this union has been to improve the global competitiveness of the member states and thus the region as a whole.

**UEMOA Map**




UEMOA, as a regional entity, has the following trade aspects that affect its global and regional competitiveness:

- Organized as a free-trade zone for goods, services, people and capital movement within its member states;
- Utilizing the fully convertible Franc CFA as a common currency;
- Home to over 85 million consumers or more than 30% of the total population of West Africa.;
- Is the largest producer of cotton in Africa- third in the world.

## Transportation in UEMOA

Transportation inefficiencies are viewed as the largest obstacle to achieving regional growth by the relative economies of UEMOA and its neighboring countries. These infrastructure inadequacies are apparent in all modes of transport including roads, rail and aviation, and thus is negatively affecting the growth of exports through the high cost of transportation and indirect costs levied on the respective economies.

These transportation infrastructure problems are particularly evident in the three landlocked countries within UEMOA; Burkina Faso, Mali and Niger. There exists a great need for these countries to enhance their transportation access to seaports to serve current import and export demand, and projected trade growth.

Niger is the smallest of the three economies, whereas Mali is the largest. Burkina and Mali have rail access to the Port of Abidjan in Cote d'Ivoire and Port of Dakar in Senegal, respectively. Historically the Port of Abidjan has handled the bulk of Malian merchandise, despite access to the Port of Dakar via railway. This is in part due to the limited expansion capabilities in the Port of Dakar as compared to the Port of Abidjan, and that Mali is a larger exporter than the other UEMOA landlocked countries and the capacity of the railway to Dakar and that port is just not sufficient to handle its needs. Mali's exporters and in turn economy, would benefit significantly from having a railway access to the Port of Abidjan.

The UEMOA commission has been at the "heart" of regional transportation sector reform. The organization is entrusted by donors, its member states and other regional organizations such as NEPAD and ECOWAS to undertake studies and implement projects in the various sub-sectors. Projects which promote the integration of the member states and can contribute to their economic growth constitute a high priority on their list. As a result railway infrastructure is a key area identified by UEMOA.

New and improved railways in the region will help alleviate the financial burden that an overused roadway system throughout UEMOA is causing. In addition to the need for considerable rehabilitation/modernization of existing roads, new "Greenfield" highways/routes are required to overcome the lack of alternative transportation such as by air or rail.

**Railways:** The total rail network in sub-Saharan Africa is made up of a little over 89,000 kilometers (km) on a continent with a surface area of about 30 million square km. This means that sub-Saharan Africa's rail system has a mean density of 2.9 km per 1,000 square km, or one of the lowest in the world. The UEMOA member states are well below the West African average. The lack of rail interconnection found with the existing limited network of railways within the UEMOA member states hampers an efficient movement of goods and people, and leads to prohibitive shipping costs and lengthy time of deliveries. Following the global trend towards cargo containerization, an enhanced railway network can offer better service than existing reliance on truck transport. The railway sector in UEMOA has experienced mostly successful privatizations such as Sitarail in Burkina Faso/Cote d'Ivoire, and more recently Transrail in Mali/Senegal. These private sector companies (a mix of private and government shareholders) have demonstrated an ability to improve the rail operations, rehabilitate their rail structure and rolling stock, and provide reliable service. Much has been learned by UEMOA and the respective host countries in the dealings with privatization and concessions for the railway infrastructure and operations.

**Targeted Countries**

The Project will principally impact the economies and people of 2 countries. Mali primarily given that it will provide a highly efficient transportation project for its exports and for its imports (principally petroleum product imports) to a second and larger port, that it will host a major construction project in the railway transportation infrastructure, and the creation of permanent jobs and more; the Project will also impact Burkina Faso which will benefit from improvements in existing rail capacity so as to accommodate the increased traffic arising from the new railway link and access to the new railway in Sikasso which is less than 100 kms from the border with Mali. Aside from all being a part of UEMOA, these countries enjoy French as a common main language, the Franc CFA as a currency, and agriculture as a significant industry sector. Burkina, a land-locked country, has over 90 percent of its labor pool in the agricultural sector, whereas Mali which is also landlocked has 70 percent. Mali has important natural resources prospects ranging from precious metals to oil, and it has succeeded in the last few years to attract significant foreign investment in these sectors. Bamako, the capital of Mali, is believed to be the fastest growing city in Africa. Passenger transportation via rail is becoming increasingly more important in the region. The Project would result in the possibility for a passenger to embark in Dakar and reach Abidjan, or Ouagadougou, and eventually Niamey in Niger, all via rail. Air travel options are limited and expensive for the masses, and roads can be in difficult conditions with regular checkpoints, and also costlier to travel.

Mali is experiencing significant export opportunities as a result of the expansion in agriculture investments and irrigation systems, as well as through large natural resources investments. Mali, as with the other landlocked countries, imports fuel which is traditionally transported via rail and in the case of the Sitarail line accounted for half the volume. During the civil war in Cote d'Ivoire a lot of fuel was transported via trucks, an inefficient and costly alternative. Mali's exports need to have better access to railway transportation, including access to more than just one port. With the completion of the Project, the Sikasso area (the main city connecting after Bamako), would be able to expand its agricultural production and also develop downstream processing plants such as juice plants. An issue in Mali has been the rotting of agricultural production due to the lack of transportation capacity for export. The option to move products towards Dakar or Abidjan should also create a competitive setting for exporters seeking to minimize their transportation costs.

Burkina's location makes it an important country from a transportation perspective. It acts as a significant crossroad for merchandise flowing from Mali, Niger to Ghana, Cote d'Ivoire, Togo and Benin. These goods are always seeking to flow to the closest port. The Project would result not only in a hedge of ports for Burkina exports which could be taken by road to the new railway link in Sikasso (Mali) close to their border so as to reach the Port of Dakar, or find its way onto the existing SITARAIL railway in Burkina towards the Port of Abidjan, this existing railway benefiting from an upgrade as part of the Project and able to accommodate increased traffic.

If one of the other projects highly recommended in the ECOWAS Study gets implemented, the Kaya to Niamey railway, Niger will also benefit from the upgrades to the SITARAIL railway in Burkina and Cote d'Ivoire that will be caused by the Project.

Mali and Burkina have enjoyed political stability and have the support of donor agencies as evidenced by years of financial aid. This aid will be significant in the effort to secure successful financing structures for the Project it will most likely not be financed solely by private sector sources.

**UEMOA Regional Railway Project**

As part of the UEMOA Commission's transportation sector improvements, a need has been identified to interconnect member states with new railways. This need is particularly evident for the landlocked countries of Mali, Burkina and Niger. UEMOA believes that these countries must augment their rail networks to enhance trade and passenger transport and reduce stress and congestion on the roads system, and thus increase the production of exportable products (such as agricultural and mining goods).

While Africa as a continent has a very low railway density, the UEMOA region is well below the African average. As a benchmark for strengthening rail transport, strong railway networks have proven to successfully contribute to economic growth in other markets. On a global scale, the trend towards cargo containerization favors the use of railways.

For the UEMOA region, larger, bulk export merchandise produced is better suited for rail transportation (e.g. cotton and ore). In addition, UMEOA also favors the creation of alternatives to truck transport, which is "costing" the member states in the form of continuous maintenance and rehabilitation, and higher transportation costs.

The ECOWAS Master Plan calls for an interconnection between the countries of Mali and Cote d'Ivoire. The ECOWAS study included this interconnection amongst the 17 it evaluated, and concluded that it ranked third in terms of priority of development and implementation needs, and merited to be built. This interconnection is a new railway link between Bamako and the Cote d'Ivoire border, going through Sikasso in Mali, and then into Cote d'Ivoire to the city of Ouangolodougou where it will link into the SITARAIL railway. The Study will not address the segment that lies in Cote d'Ivoire due to restrictions set by the US State Department.

The Project consists of 474 Kms of new railway in Mali between Bamako and Niangoloko at the border with Cote d'Ivoire. The Project will connect to 95 Kms of new railway in Cote d'Ivoire to Ouangolodougou. Per the ECOWAS Study, an estimated cost of $1.88 million per Km, the track capital costs will approximate $1.1 billion. The rehabilitation of existing railways is estimated at $290 million. The rolling stock for both freight and passenger trains is estimated at $490 million, and buildings, communications, switches, and other smaller items is estimated at $64 million. About 10-15% of these costs will occur in an expansion phase, the rest will be incurred in the first 6-7 years. The total capital costs are thus estimated at $1.94 Billion.

**US Export Potential**

The US export potential revolves mainly around the supply of locomotives for freight and passenger trains, some railcars, and electronic equipment. The range of export potential is estimated at $80 million to $290 million, with prime candidates being GE Transportation and ElectroMotive Diesels (formerly GM) and their locomotives. We have assumed that railcars will become more difficult for US manufacturers to get selected for, in particular with competition arising out of India but also Europe, and at most assume that $46 million out of the possible $258 million in railcars may come from the US, and primarily for bulk freight.

**Foreign Competition and Market Entry Issues**

Narrow gauge rail has been not been a major opportunity for US manufacturers other than for locomotives and electronic switching equipment. Countries who still have a lot of narrow gauge include India and they have been supplying railcars to the SITARAIL and TRANSRAIL. European manufacturers are also better equipped to meet the UIC standard which is recommended in the ECOWAS Study and is consistent with what the existing railways have. There are no market entry issues that would prevent US companies from bidding for work or supplying their goods. From that perspective US suppliers will have comparable shipping costs to European suppliers and likely better than India.

**Impact on the Environment**

The ECOWAS Study identifies certain watershed areas that will need to be handled properly. Much of the suggested path runs along a highway. The environmental impact gains by having considerably less trucking of goods and bussing of people will be significant. A railway will be more environmentally friendly than the current options.

**Impact on US Labor**

There will be no negative impact on US labor as a result of this Study or Project. There will be opportunity for US jobs in the manufacturing of locomotives and other equipment for the Project.

**Justification**

The Project is a priority initiative for the regional bodies of UEMOA and ECOWAS, it has been ranked highly by the preliminary study commissioned by ECOWAS, and USTDA feasibility study funding will enable US companies to secure useful information to position themselves on the eventual procurement efforts for the Project. This is a significant development project estimated to cost over $1.9 billion over 30 years, with the 90% of it in the first 7 years or so. There are opportunities for US exports which range between 107 and 385 times the proposed grant amount. The Consultant believes that there are financing sources suitable for the Project. Regional development banks and multilateral finance organizations have access to capital for this type of project, although it will need to be supported by private sector sources for the operational concession and the investments in the rolling stock, equipment and buildings. The existing railways in the region have a number of private sector participants most of which financially strong. The Study will not delve into the part of the railway that is in Cote d'Ivoire. Only the Mali segment and in Senegal to evaluate the improvements required for TRANSRAIL railway to accommodate any traffic increase.

**Terms of Reference**

The Terms of Reference recommended by the Consultant will evaluate technical, operational, financial and environmental aspects of the new Project, some technical evaluation of upgrades required for the connecting railway segments due to the new Project, as well as develop a detailed market study, a development impact report, and an implementation plan

**Recommendations**

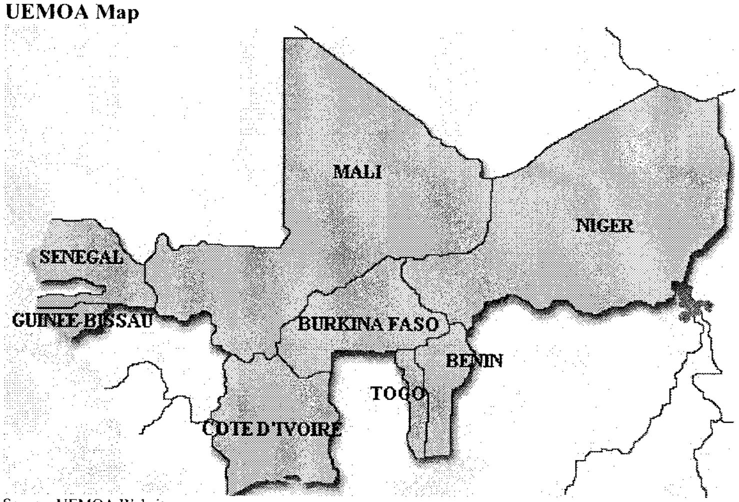
The Consultant believes that the Project can be successfully implemented and that a key step before that can occur is to complete a detailed feasibility study. This study meets the USTDA guidelines and would benefit from USTDA funding support, and is recommended by the Consultant. Considering the importance of the Cote d'Ivoire segment of the new railway link, the prohibition for USTDA to fund work in Cote d'Ivoire due to the current political relations with the US, and the desire by UEMOA commission to also study that segment, the following recommendation is made to USTDA and has been discussed with UEMOA Commission. The USTDA grant will cover only the work required outside of Cote d'Ivoire, and the recommended Terms of Reference are consistent with this requirement. When USTDA develops the Request for Proposal for Contractors to work on the Study, a parallel request for proposal will be issued by the UEMOA Commission that pertains to the Cote d'Ivoire segment and work, which work will be funded by UEMOA. In this manner the UEMOA Commission will be able to work with the same contractor team and maintain a competitive bidding environment for that work. The Cote d'Ivoire work will be contracted separately by the UEMOA commission and paid using their funds.

The Consultant has developed a budget in relation to the USTDA supported Terms of Reference amounting to $751,560. This budget is viewed sufficient and necessary to complete the tasks developed in the terms of reference. The Consultant recommends that USTDA provide a grant to the UEMOA Commission of $751,560 towards the Study.

## 2. UEMOA Commission - Project Promoter and Grantee

The UMEOA Commission is the regional agency established to oversee the union of the UEMOA member states and promote various initiatives. UEMOA consists of a free-trade zone for goods, services, people and capital movement within its members, all enjoying the Franc CFA as a common currency. This region has a dynamic common market of 80 million consumers, which represents more than 30% of the total population of West Africa. The real Gross Domestic Product for the member countries exceeds $36 billion with a growth of 4.3%. The union is aiming to improve the economic environment, thus creating optimal conditions for the mobilization of both national and foreign resources to promote development.

**UEMOA Map**




Source: UEMOA Website

The member states of UEMOA are all Francophone, although there have been prior discussions to include certain Anglophone countries. This common language thread enhances the ability for the member countries to take advantage of the UEMOA common market.

While the region represents a minority share of the West African population, it is the largest producer of cotton in Africa and the third largest in the world. In addition, as demonstrated by various successful mining projects, the region offers natural resources and attractiveness for foreign direct investment. However, the landlocked countries are poorer nations as compared to the other members.

It is agreed that one of the main causes attributed to their economic status is the lack of sufficient and effective transportation infrastructure. A few years of civil war in Cote d'Ivoire affected these economies, although now trade has been flowing normally through this important country for the region, in particular the SITARAIL volume is back to prewar levels.

It is important to point out that if there had been a railway stop in Sikasso, that during the civil war in Cote d'Ivoire when goods were unable to flow from Niger and Burkina to Abidjan, goods would have been able to reach the Port of Dakar via rail as opposed to getting trucked to Benin, or Ghana at great expense. Hence the Project would provide some hedge against another civil war.

Thus, while the creation of UEMOA has succeeded in demonstrating its usefulness, its main challenge to promote development and economic growth is reliant on the successful upgrading of transportation infrastructure and implementation of enabling regulations and legislation.

**Transportation in UEMOA**

The overall improvement of the infrastructure network in the region is seen as a necessary precedent to achieve regional growth markets. This transportation infrastructure requirement is particularly evident for the three landlocked countries within UEMOA; Burkina Faso, Mali and Niger.

Burkina Faso has historically been a cross-road for the flow of merchandise involving several UEMOA members and other neighbors and continues this tradition today. Although Mali has borders with Senegal and thus access to the Port of Dakar, and Niger borders Benin and hence has access to the Port of Lomé, a significant amount of merchandise involving Niger, Mali, or Benin, Togo, Ghana, and Cote d'Ivoire transits through Burkina Faso. As the goal of increased trade in UEMOA is materializing, the transportation infrastructure has quickly become inadequate in various aspects.

As part of its overall charter, UEMOA has adopted a Regional Transport Infrastructure Program (RTIP). The RTIP identifies transport deficiencies and needs in the region and assigns a high priority to their implementation. As a result, UEMOA asked the US government, specifically USTDA, to evaluate these transportation initiatives and identify projects that may qualify for the agency's feasibility study or technical assistance monies. USTDA followed with a Definitional Mission.

Railways, which provide a more efficient shipment method for certain goods such as cotton, oil and many others, must find a way to modernize and to link up to alternative ports and markets in order to "hedge" against a potential conflicts, as well as to broaden their potential market. Existing railways will always have expansion issues due to their narrower track gauge (metric) yet some local firms such as SITARAIL have demonstrated an ability to succeed despite the existing rail infrastructure conditions. The UEMOA Commission believes that the extension of certain railway segments would enable exporters to move products more suitable for rail transport, at a lower cost than trucking, thus reducing the highway O&M indirect costs to the local governments, while opening up more markets to sustain the railway operations.

The existing railways among the UEMOA member states cover some 3918 kilometers of total network length with limited interconnection between main cities and capitals of the Union. The exception is the Abidjan to Kaya (via Ouagadougou) (1264 km) and Dakar to Bamako (1228 km) railways. Two other existing railways, the Cotonou to Parakou and Lomé to Blitta railways are limited to inner-country coverage.

Constraints of the existing rail system confirmed by the Consultant also include the following:

- Poor track infrastructure conditions limiting speed and leading to railcar mechanical breakdowns and derailments;
- Dated rail and control systems technology;
- Overuse and insufficiency of rolling stock;
- Metric gauge track spacing and poorly maintained tracks limiting the speed of trains to 60-80 km/h and a reduced load capacity.

A successful initiative in the railway sector in UEMOA has been the privatization of the concession to operate the railways in Mali (and Senegal), and of Burkina (and Cote d'Ivoire). Private consortia with shipping interests and rail operating expertise have secured these concessions and have demonstrated considerable positive impact on their operations.

The Roads Sector, is a very active investment and construction program within UEMOA. Through work directly done by local Ministries and the UEMOA Commission, there is a significant amount of funding which has been secured from donor agencies which has funded important roads program. The situation in the road sector argues for additional capacity at the level of air and railway transport. Merchandise less attractive for road transportation is forced on trucks, the cost of shipment affects their competitiveness, the weight deteriorates the roads faster than conceptualized, and the costs of maintenance increase. Further, the vagaries of driving long distances within Africa add to inefficiencies and costs. UEMOA's road program aims to link all major capitals and cities with a well-built and well-maintained system of highways. These road networks require a balance with railway transportation alternatives so as to curb their premature deterioration.

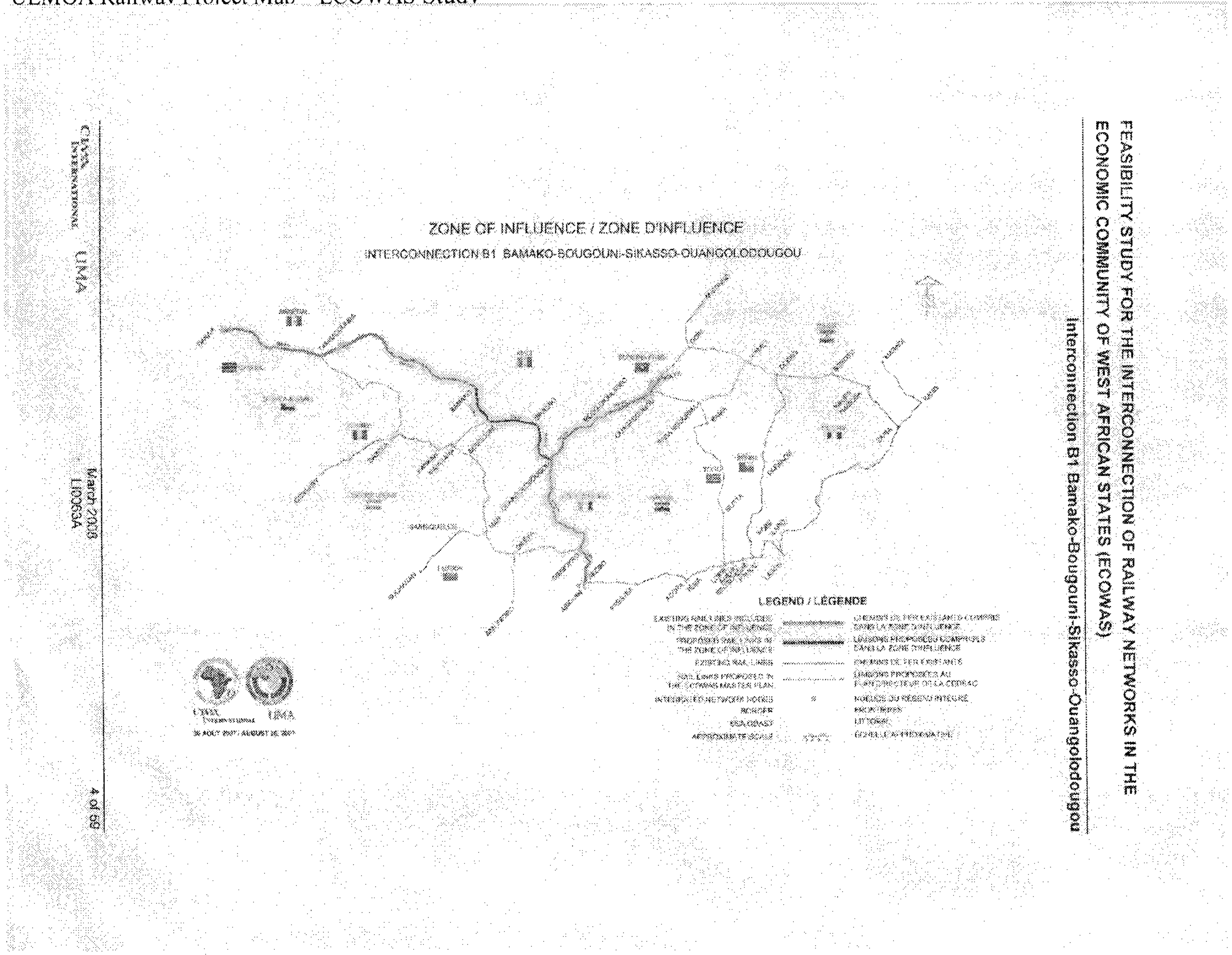
UMEOA Commission as Grantee: The Commission has experience overseeing several feasibility studies and works, including USTDA grants. It is not a project sponsor, but can be a promoter and facilitator as it will be for the Project. It can quickly bring harmony amongst the participating nations, and the interested regional development agencies and banks.

## 3. Project Description

A country such as Mali, like most of Africa, is in need of improved high capacity infrastructure, such as railroads. West Africa's railroad network is below the average density in Africa (2.73 km for every 1000 km2 vs. 1.70 km) and it is estimated that it will therefore need over 6,300 km in new railroads to reach the 'average' for Africa and contribute more adequately to the development of the local and regional economies.

Burkina Faso, Mali and Niger depend mostly on road and rail links to the Port of Abidjan (Côte d'Ivoire) for most of their export/import. While goods from Eastern Mali will travel by road to the Port of Abidjan or to Bobo-Dioulasso in Burkina to make use of the SITARAIL railway. Despite rail access from Bamako to the Port of Dakar, historically more goods have been exported via Abidjan, and the imports of fuel come principally via that same port. Hence ECOWAS considered that a railway between Bamako and Cote d'Ivoire would considerably enhance the transport of goods and people. Below is a map depicting the existing railways and the new railway link in red.

UEMOA Railway Project Map – ECOWAS Study



The Bamako-Bougini-Sikasso-Ouangolodougou railway shown in the preceding map is by far the most far-reaching railway project identified by ECOWAS and evaluated as part of the ECOWAS Study. Laying 474 Kms of new railway in Mali and 95 Kms in Cote d'Ivoire brings together the longest and busiest railways of West Africa, creating a 3,100 Km railway network spanning four countries (640km in Senegal, 1,060km in Mali, 743 in Côte d'Ivoire and 646 in Burkina Faso). The line will easily follow highway R7 in Mali, but South of Sikasso it will be more challenging due to varied elevations. The Niger River will require a bridge at Bamako.

Capital Costs will include the construction of the new track, which approximates $1.1 Billion assuming $1.88 million per Km. Train control systems and ancillary costs (buildings and other) are estimated at $27.3 million and $36.4 million respectively. Total infrastructure cost is thus estimated at $1.13 Billion. This portion of the Project cost is contemplated to be funded by public funding arising from governments, concessionary financing from regional and multilateral development banks. As with the other railways the infrastructure is best funded and owned by the local governments.

The Project will also consider the rehabilitation and upgrade of existing railways so as to accommodate the increased traffic. Considering the 586 Kms in Mali and 640 Kms in Senegal, and 602 Kms in Cote d'Ivoire, this rehabilitation work is estimated at $292 million. This cost may be shared between public finance and the existing railway operators SITARAIL and TRANSRAIL.

The rolling stock is mostly composed of freight trains. For a 2015 start the general freight trains cost is estimated at $200 million. This includes about 880 cars, and 27 locomotives (120 tonnes/six axle). The remaining rolling stock (passenger trains and bulk) is estimated at $180 million. General Freight train expansion by 2030 is estimated at a further $112.8 The rolling stock would be funded by private sector partners, likely obtaining a share of the financing from export credit agencies and other official sources of finance.

Overall the Project is estimated to require $1.75 billion to start up in 2015.

There is an economic triangle referred to as Sikasso-Korhogo-Bobo Dioulasso (SKBo Zone) which would directly benefit from the Project. The SKBo Zone accounts for 4 million people, over a 150,000Km2 territory, with an economy estimated at around $2 billion. The ECOWAS Study estimates that the transportation sector along that corridor amounted to over $100 million of added value in 2000, the bulk of which lying in Burkina. The zone has the largest production share of cotton for the region, is the largest producer of Mangoes, and each city is the largest cattle regrouping center for their respective countries.

Burkina has an existing railroad, which is operated by Sitarail, a consortium which secured a long term concession to operate Burkina's railroads. The principal railway managed by Sitarail runs from just north of Ouagadougou in Kaya to the Port of Abidjan. Sitarail is controlled by the Groupe Bollore of France and has enjoyed the concession since 1996. While the railroad is comfortably moving merchandise between Abidjan and Burkina, and has done so in the last couple of years, its capacity is not sufficient to address the needs of Burkina, Mali, and Niger. Upgrades to the SITARAIL line would allow for increased capacity. The Project would also enable traffic to originate in Mali on a new railway, and make use of the SITARAIL line at a juncture in Cote d'Ivoire. Hence Malian traffic would not need to get transported to Bobo-Dioulasso to access the rail, and the upgrades to SITARAIL's line will mostly be necessary between Ouangolodougou and Abidjan.

Passenger travel will be handled by the Project and will allow for travel between Dakar to Abidjan, as well as domestic travel between Bamako and Sikasso. The ECOWAS Study conservatively projects 248 million passengers per kilometers, but recognizes that comparing that estimate to other countries in Africa that the traffic could double or triple under some conditions. The movement of people within UEMOA is a fact and the commission would prefer that more of it occurs via rail. The distance to travel from Dakar to Abidjan via the existing and proposed new railway line, would not be much longer than traveling along the coast which would require border crossings in Gambia, Guinea-Bissau, Guinea, Sierra Leone, and Liberia, but infinitely easier.

The Project will result in a number of benefits to Mali, Burkina, and indirectly Niger. A new rail line from a proposed 'convergence' point in Eastern Mali to another major seaport will allow for the economical enhancement of existing transportation methods of moving goods and people. In addition, it will provide a catalyst to promote new export growth in mining, agriculture, etc. Both Mali and Burkina Faso have mineral deposits which require expanded railway capacity. On the agricultural side, the line may improve food distribution within the countries themselves saving food spoilage and reducing costs; a savings that can be passed along to consumers.

The ECOWAS Study projects the following freight volumes:

All Cars/ Trailing Annual Volume in Tonnes by 2030

| **Originating/Destination** | Dakar | Bamako | Bougouni | Sikasso | Abidjan |
|---|---|---|---|---|---|
| Dakar | | 967,250 | 0 | 0 | 0 |
| Bamako | 690,893 | | 0 | 0 | 690,893 |
| Bougouni | 0 | 0 | | 0 | 453,987 |
| Sikasso | 0 | 0 | 0 | | 453,987 |
| Abidjan | 0 | 967,250 | 635,582 | 635,582 | |

The traffic estimates exclude existing traffic on the SITARAIL and TRANSRAIL lines. It is interesting to note that the ECOWAS Study projects that the traffic from Bamako to Abidjan will be equivalent to the volume shipped to Dakar. It is also evident from the results that only high level market analysis was done in that ECOWAS Study and the proposed USTDA study calls for a detailed market study.

## Financing and Risks

Any new railway line will, as with many transport projects on the African continent, have its financing challenges without a solid, private sector-driven financing structure and sourcing. Due to the anticipated complexities of each rail segment and the lack of government financial resources to either a) finance a significant portion of the cost, or b) take on a long term Master Lease or other, these projects will likely need to secure a significant amount of donor financing and may have to be outsourced to a group of private investors/operators which can then "tap" into additional debt financing programs.

The ECOWAS Study estimates that the Project will generate in excess of $500 million in revenue by 2030, with an operating cash flow reaching over $120 million within a few years of operation. Under a public private partnership financial construct, with the infrastructure investment undertaken by the public sources, the projected cash flow is encouraging. As governments will generate additional economic benefits outside of the cash flow generated directly by the new railway infrastructure, the public portion of the financing (fixed infrastructure component or ~$1.1 to $1.3 billion) can share in part of the Project cash flow and any gaps arising from these other benefits. Financing terms for the public portion can also be tailored more easily with long grace periods, grant components, and deferred interest, so as to ensure there is enough left to entice the private sector investment. The latter would be leveraged so as to maximize the return on capital and to take advantage of attractive lending terms from export credit agencies and similar.

In Burkina and in Mali, the current railway operators Sitarail and Transrail do not own the rail, but own the concession and the rolling stock, as well as adjunct facilities. UEMOA believes that donors can fund the railway investments and responsibility for the financing of operational assets will be left to the private sector operator/s. This approach would lead to a competition of the operations and financing of the rolling stock to private sector operators such as Sitarail or other railroad companies. Under such a scenario, where the donor banks fund the large part of the project cost and an experienced operator takes on the responsibility to generate revenues and profitability, the Contractor believes that with a positive feasibility study these projects could secure financing. One approach could be that UEMOA leads the financing efforts for all proposed railway segments with the understanding that private sector operators would be installed after meeting certain criteria. Demonstrating that funding for the railway is available would attract considerably more interest from operators; who could then focus on operations, concession fees, rolling stock financing, and adjunct facilities.

The Consultant believes that the projects' financial requirements (concession holder/s, rolling stock, operations and facilities) will require equity participation by either a rail operator or large multi-modal shipping company, or a combination as has been contemplated already with other local projects. However, regardless of the ownership structure, financiers and concession holders will want to get "comfort' on the respective projects' ability to secure a constant and reliable revenue stream. Hence, the market and commercialization aspects of the feasibility study will be important tasks.

Overall sources of finance for the railways include the African Development Bank, the Islamic Development Bank, the World Bank and ECAs. For the concession itself, the private sector "arms" of the official sources above, ECAs such as US Ex-Im Bank, OPIC, and various dedicated Africa debt funds could be utilized. It should be noted that the projects' revenue stream will be in CFA francs for the most part, hence currency conversion and risk can be managed/mitigated.

While the projects aggregate to a large investment, there are successfully financed regional projects with multiple-lender structures, well above the amount being considered by initial project cost estimates. The Consultant believes that funding would be available, provided the project can demonstrate viability to the finance markets.

## 4. US Export Potential, Competition and Impact of US Jobs

Significant US exports could develop from the construction of a railway. For example, GE Transportation and EMD are US manufacturers of locomotives that would suit such a new railway (and are currently operating in the region). These locomotives average approximately $3.5 million each alone before export costs and related items. The project cost of a new railway is dependent on a number of major, cost-affecting variables, such as alignment, specified equipment and environmental issues, with most of the cost being civil engineering and rails. Goods and services anticipated to be sourced from the US include, track, signalization equipment, stops, locomotives, control systems, signage, engineering/design and project and construction management. It can be conservatively estimated that over $150 million could be exported from the US, with a potential of up to $290 million. Below is a chart analyzing the potential US export.

**US Export Potential**

| Locomotives | 2015 Units | 2030 Units | Unit Cost millions | 2015 Cost | 2030 Cost | Total |
|---|---|---|---|---|---|---|
| Freight | 22 | 13 | $ 3.70 | $ 81.40 | $ 48.10 | $ 129.50 |
| Bulk Commo( | 15 | | $ 3.00 | $ 45.00 | | $ 45.00 |
| Passenger | 7 | | $ 3.50 | $ 24.50 | | $ 24.50 |
| Yard | 6 | | $ 1.50 | $ 9.00 | $ - | $ 9.00 |
| | | | | $ 159.90 | $ 48.10 | **$ 208.00** |
| Spares | 20% | | | $ 31.98 | $ 9.62 | |
| **Total Locomotives and Spares** | | | | **$ 191.88** | **$ 57.72** | **$ 249.60** |
| **Rail Cars** * | **2015 Units** | **2030 Units** | **Unit Cost millions** | **2015 Cost** | **2030 Cost** | **TOTAL** |
| **Freight Cars** | 879 | 588 | $ 0.10 | $ 87.90 | $ 58.80 | **$ 146.70** |
| **Bulk Cars** | 367 | | $ 0.13 | $ 45.88 | | **$ 45.88** |
| **Passenger Cars** | 52 | | $ 1.25 | $ 65.00 | $ - | **$ 65.00** |
| | | | | **$ 198.78** | **$ 58.80** | **$ 257.58** |
| Spares | 20% | | | $ 39.76 | $ 11.76 | **$ 12.88** |
| **Total Rail Cars and Spares** | | | | **$ 238.53** | **$ 70.56** | **$ 270.45** |
| **Total Rolling Stock** | | | | **$ 430.41** | **$ 128.28** | **$ 520.05** |
| **Traffic Reporting and Tracking Systems** | | | | **$3** | | |
| **Communications Systems** | | | | **$3** | | |
| **Engineering and Project Management** | | | | **$50** | | |
| | | | | **2015** | **2030** | **TOTAL** |
| **TOTAL POTENTIAL US EXPORTS** | | | | **$486.41** | **$128.28** | ***$614.69*** |
| **TOTAL Without Rail Cars** | | | | **$247.88** | **$57.72** | ***$344.24*** |

*: Rail Cars potential from US manufacturers depends on need for UIC standard which is currently not met by US manufacturers, or not as competitive as European/Indian. Even under a UIC standard opportunity existis for Bulk Commodity use if commodity exporters can have their own train sets and the bulk rail cars will not mix with other train sets.

The above chart was developed using in part the rolling stock estimates developed in the ECOWAS Study. It is not realistic to assume that US export will be exclusive to the Project and generate $615 million of exports per the above analysis. Foreign competition, export credit agency funding tying sourcing, and other aspects will create pressure on the ability for US manufacturers and service companies to position themselves on the Project's procurement. Positively there are several areas where US products can compete and a minimum amount of US exports can be assumed. The chart below considers a Low to High probability, ranging from $80 million to $290 million of US exports. The Multiplier is based on the recommended USTDA grant amount.

| US Exports Potential | LOW 33% | MEDIUM 60% | HIGH 75% |
|---|---|---|---|
| Locomotives | $ 61.78 | $ 112.32 | $ 187.20 |
| Rail Cars | 0 | $ 22.94 | $ 45.88 |
| Other | $18.48 | $28.0 | $56 |
| **Total** | **$ 80.26** | **$ 163.26** | **$ 289.08** |
| **Multiplier** | 107 | 217 | 385 |

## Select Examples of Potential US Suppliers

The Consultant has preliminarily identified potential US suppliers and exporters for goods/services anticipated on a project such as the Ouagadougou-Ghana rail project. The interest and availability of goods from such suppliers would be confirmed under the USTDA Feasibility Study. The preliminary list of suppliers is found below.

**Select Examples of Potential US Suppliers**

| Supplier | Goods/Services | Website |
|---|---|---|
| ElectroMotiveDiesels<br>LaGrange, IL (Chicago Area) | Diesel-electric locomotives and support – formerly GM | http://www.emdiesels.com |
| GE Transportation<br>Reading, PA | Diesel-electric locomotives, rail cars, switches and electronics | www.getransportation.com |
| A&K Railroad Materials, Inc.<br>Salt Lake City, UT 84130 | Rail, switches, track and turnout components (frogs, ties, tools, spikes, etc.) | http://www.akrailroad.com |
| POHL Corporation<br>Reading, PA 19612 | Rails and accessories, spikes, bolts, fasteners, gauge rods, switch stands, switches, | http://www.pohlcorp.com |
| Atlas Railroad Construction Company<br>Eighty Four, PA 15330 | Rail construction, tie/rail changeouts, surfacing, rehabilitation, turnkey engineering, design, consulting, construction management | www.atlasrailroad.com |
| Parsons Brinkerhoff<br>New York, NY 10119 | Rail (and transportation) planning, design, construction management of intermodal, passenger, freight, commuter, heavy/light rail, etc. | www.pbworld.com |
| Nortrak (VAE Nortrak North America)<br>Birmingham, AL | Trackwork and track components | http://www.nortrak.com |
| Atlantic Track and Turnout Company<br>Bloomfield, NJ 07003 | Rail, relay rail, joint bars, tie plates, crane runway systems, etc. | www.atlantictrack.com |
| Harmer Steel<br>Portland, OR 97231 | Rails, crane rails, fasteners, turnouts | www.harmersteel.com |

# 5. Country Summaries

## Mali

**Figure 3.2 Map of Mali**


Source: CIA World Factbook

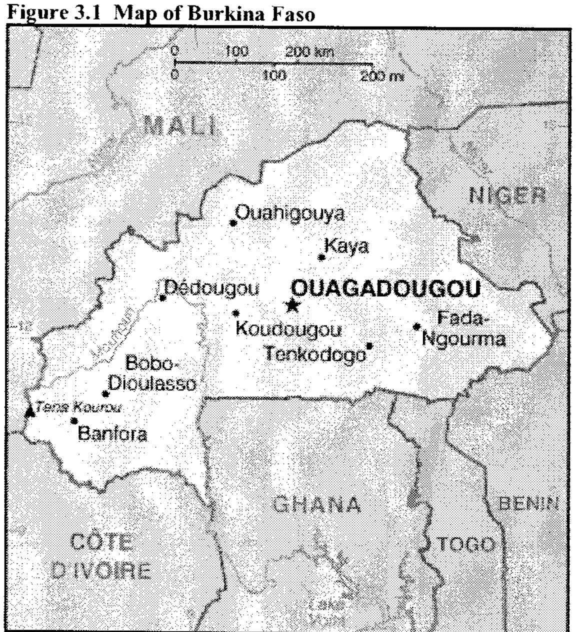
| Table 3.2 Summary of Mali | |
|---|---|
| Capital | Bamako |
| Land Area: | 1.24 million sqkm (about 2 times the size of Texas) |
| Terrain/Climate | Savanna and Desert/Semi-tropical in south. Arid in North |
| Exploited Natural Resources | Gold, phosphate, kaolin, salt, and limestone currently mined; deposits of bauxite, iron ore, manganese, lithium, and uranium are known or suspected. |
| Environmental Issues | Deforestation, soil erosion, desertification, inadequate supplies of potable water, poaching |
| Population | 12.3 million (July 2008 estimate) |
| Language | French (official) and Bambara (spoken by about 80% of the population) |
| Government and Legal | Republic |
| US Diplomatic Representation | Amb. Abdoulaye Diop 2130 Massachusetts Ave, NW Washington, DC 20008 (202) 332-2249 |
| Economy | Mali's per capita gross domestic product (GDP) of $250 (2002) places it among the world's 10 poorest nations. Its potential wealth lies in mining and the production of agricultural commodities, livestock, and fish. Agricultural activities occupy 70% of Mali's labor force and provide 36% of the GDP. Cotton, gold, and livestock made up 80%-90% of total export earnings in Mali in 2003. Small scale traditional farming dominates the agricultural sector, with subsistence farming--of cereals, primarily sorghum, millet, and maize as well as rice, sugarcane, cotton, peanuts, and tobacco--on about 90% of the 1.4 million hectares (3.4 million acres) under cultivation.<br><br>The high cost of petroleum products, the fall in the world market price for cotton and gold, and |

| | |
|---|---|
| | corresponding loss of customs revenues put pressure on the economy and led the government to be very tight on cash disbursements in recent years. In addition, the 2002-03 closure of the main import/export route to the Port of Abidjan increased the pressure on the fragile Malian economy. Nonetheless, a doubling of cotton production and double-digit increases in cereal and gold production boosted real GDP growth from 3.5% in 2001 to nearly 6% in 2003.<br>The government has started plans to develop fish breeding, mainly in the Niger delta, in order to boost fish production.<br><br>Mining is still a growing industry in Mali, with gold accounting for some 80% of mining activity. There are considerable proven reserves of other minerals not currently exploited. In 2002, gold became Mali's number one export, before cotton and livestock. There are two large private investments in gold mining: Anglo-American ($250 million) and Randgold ($140 million), both multinational South African companies located respectively in the western and southern part of the country.<br><br>GDP $13 billion (2007) |
| Economy Growth Rate | 2.8% (2007 est.) |
| Labor Force by occupation | Agriculture- 80% (2007 est.) services/industry/commerce- 20% |
| Literacy/Education | 46.4% age 15 and over can read and write (2003 est.) |
| Exports ($/ type) | $294 million f.o.b. (2007 est.)/ cotton, gold, livestock |
| Export Partners | China 19.6%, Thailand 10.5%, Brazil 4.7%, France 4.6% (2007) |
| Imports ($/type) | $2.4 billion f.o.b. (2007 est.)/ petroleum, machinery and equipment, construction materials, foodstuffs, textiles |
| Import Partners | France 12.9%, Senegal 12.7%. Cote d'Ivoire 10.9% (2007) |
| Currency | Communauté Financière Africaine Franc (XOF) note through Central Bank of West African States |
| Exchange Rate | 500 per US Dollar (2008) |
| **Transportation Infrastructure** | |
| Railways | France 15.4%, Senegal 7.7%, Cote d'Ivoire 7.1% (2003) |
| Highways | total: 15,100 km<br><br>paved: 1,827 km<br><br>unpaved: 13,273 km (1999 est.) |
| Ports and Harbors | Koulikoro |
| Airports | Paved total: 27 (2003 est.) -- Paved: total: 9 -- 2,438 to 3,047 m: 4 -- 1,524 to 2,437 m: 4 -- 914 to 1,523 m: 1 (2004 est.)<br>Unpaved total: 19 -- 2,438 to 3,047 m: 1 -- 1,524 to 2,437 m: 5 -- 914 to 1,523 m: 5 -- under 914 m: 8 (2004 est.) |
| Transportation Notes: | |

Source: CIA World Factbook, World Bank, US Dept. of State, AfDB

## Burkina Faso

**Figure 3.1 Map of Burkina Faso**




Source: CIA World Factbook

| Table 3.1 Summary of Burkina Faso | |
|---|---|
| Capital | Ouagadougou |
| Land Area: | 274,200 sq km (about the size of Colorado) |
| Terrain/Climate | Savanna with some hills in West and Southwest/Sahelian with wet & dry seasons |
| Exploited Natural Resources | Manganese, limestone, marble, gold, antimony, copper, nickel, bauxite, lead, phosphates, zinc, silver (limited quantities) |
| Environmental Issues | Reoccurring droughts and desertification, population distribution, poor economy, overgrazing, deforestation, soil degradation |
| Population | 15.3 million (July 2008 estimate) |
| Language | French (official), Moore, Dioula |
| Government and Legal | Parliamentary Republic, French civil law system & customary law |
| US Diplomatic Representation | Amb. Paramanga Ernest YONLI 2340 Massachusetts Ave, NW Washington, DC 20008 (202) 332-5577 |
| Economy | One of the poorest countries in the world with few natural resources, a fragile soil, and a highly unequal distribution of income. Following the African franc currency devaluation in January 1994 the government updated its development program in conjunction with international agencies, and exports and economic growth have increased. Maintenance of macroeconomic progress depends on continued low inflation, reduction in the trade deficit, and reforms designed to encourage private investment. The internal crisis in neighboring Cote d'Ivoire continues to hurt trade and industrial prospects and increase their dependence on international assistance.<br><br>Burkina is attempting to improve the economy by developing its mineral resources, improving its infrastructure, making its agricultural and livestock sectors more productive and competitive, and stabilizing the supplies and prices of food grains. Staple crops are millet, sorghum, maize, and rice. The cash crops are cotton, groundnuts, karite (shea nuts), and sesame.<br><br>Manufacturing is limited to cotton and food processing (mainly in Bobo-Dioulasso) and import |

| | |
|---|---|
| | substitution heavily protected by tariffs. Some factories are privately owned, and others are set to be privatized. Burkina's exploitable natural resources are limited, although deposits of manganese, zinc, and gold have attracted the interest of international mining firms.<br><br>Burkina is a Millenium Challenge Account Threshold Country.<br>GDP (2007) was $17 billion |
| Economy Growth Rate | 4.2% (2007 est.), down from ~5.3% |
| Labor Force by occupation | Agriculture- 92% (2003 est.) mostly subsistence, commerce/govt/svc-5.5%, industry- 2.1% |
| Literacy/Education | 26.6% age 15 and over can read and write (2003 est.) |
| Exports ($/ type) | $617 million f.o.b. (2007 est.)/ cotton, livestock, gold |
| Export Partners | China 29.6%, Singapore 15.7%, Thailand 7%, Ghana 6.4%, Niger 4% (2007) |
| Imports ($/type) | $1.3 billion f.o.b. (2007 est.)/capital goods, foodstuffs, petroleum |
| Import Partners | Cote d'Ivoire 25.8%, France 20.6%, Togo 7%, Belgium 5% (2003) |
| Currency | Communauté Financière Africaine Franc (XOF) note through Central Bank of West African States |
| Exchange Rate | 500 per US Dollar (2005) |
| **Transportation Infrastructure** | |
| Railways | total: 622 km<br>narrow gauge: 622 km 1.000-m gauge<br><br>Another 660 km of this railway extends into Cote D'Ivoire (2003) |
| Highways | total: 92,495 km<br><br>paved: 3,857 km<br><br>unpaved: 88,638 km (2004) |
| Ports and Harbors | None |
| Airports | 33 (2003 est.)<br>Paved: total: 2 -- over 3,047 m: 1 -- 2,438 to 3,047 m: 1 (2004 est.)<br>Unpaved: total: 31 -- 1,524 to 2,437 m: 3 -- 914 to 1,523 m: 11 -- under 914 m: 17 (2004 est.) |

Source: CIA World Factbook, World Bank, US Dept. of State, AfDB

## 6. Enabling Activities

A project such as the proposed railway will require a number of fairly complex activities in order to gain the necessary 'traction' it needs, especially considering the geo-political challenges facing a project spanning two different countries.

The ECOWAS Study determined that the railway project is supported by the Governments of Mali and Cote d'Ivoire, the African Development Bank, ECOWAS, and of course the UEMOA commission is promoting it. As this particular link in the ECOWAS Study was ranked 3rd in terms of priority for development out of the 17 studied, one can garner that buy-in from the various regional agencies and banks will not pose unusual obstacles.

The region has useful precedents for public private partnerships in the railway sector, facilitating concerns about a lack of a regulatory framework able to accommodate such projects.

In addition to this regional support, the proposed Feasibility Study will include research activities, which will enable the project to move forward from a conceptual stage to development, implementation and operation. Paramount to the successful implementation of the project is the execution of a transparent process for the selection of private sector participants. For example, it will be necessary to develop and implement a process for selecting financing, construction/turnkey contractors, equipment suppliers, operators, users, etc. so they can bring value to the new railway project.

## 7. Development Priority

The current method of transportation utilized for import/export and regional movement of goods and passengers is by truck, car or rail through an existing (less efficient) system of multi-modal transport methods and networks. This is clearly having a negative impact on the overall development of the region. The regional organizations recognize that critical to regional success is new and more efficient rail networks able to move goods and people at lower cost and in less time than current methods. The Project will promote an improvement in the cost and efficiencies of industrial activities in the region; and thus stimulate economic growth, create new jobs and assist in the remediation of poverty.

The overall objective of the project is to reduce the delay that Africa has with respect to Europe in general, and West Africa in particular in the construction and interconnection of railway infrastructure suitable to sustain the development of the continent in line with the NEPAD goals and individual country growth targets.

In recent years, an added and very strategic objective concerns the UEMOA landlocked countries' ability to develop several ports of export alternatives.

# 8. Social and Environmental Impacts

The railway project would result in a series of positive social and environmental impacts for Mali primarily but also for Senegal, Burkina Faso, and Cote d'Ivoire. By improving the delivery of goods to market and increasing the mobility of the population, the railway would assist the region in meeting growth targets and alleviating poverty and thus the region's reliance on foreign aid.

Rail projects are inherently environmental 'challenges'. The project will be required to comply with the environmental policies of the World Bank. As with the development of any new facility, care must be taken to avoid any long-term environmental impacts on the surrounding area or affected transportation corridors.

The proposed preliminary environmental impact evaluation included with the Feasibility Study's TOR will address the issues associated with rail transport in greater detail.

# 9. Foreign Competition and Market Entry Issues

Narrow gauge railways has been not been a major opportunity for US manufacturers other than for locomotives and electronic switching equipment. Manufacturing countries that still have considerable narrow gauge in operation include India and they have been supplying railcars to the SITARAIL and TRANSRAIL. European manufacturers are also better equipped to meet the UIC standard which is recommended in the ECOWAS Study and is consistent with what the existing railways have. There are no market entry issues that would prevent US companies from bidding for work or supplying their goods. From that perspective US suppliers will have comparable shipping costs to European suppliers and likely better than India. GE and ElectroMotive Diesels representatives were both enthusiastic about the potential for their locomotives, switching equipment, and in the case of GE rail cars as well.

# 10. Impact on US Labor

There will be no negative impact on US labor as a result of this Study or Project. There will be opportunity for US jobs in the manufacturing of locomotives and other equipment for the Project.

# 11. Justification

The Project is a priority initiative for the regional bodies of UEMOA and ECOWAS, it has been ranked highly by the study commissioned by ECOWAS, and USTDA feasibility study funding will enable US companies to secure useful information to position themselves on the eventual procurement efforts for the Project. This is a significant development project estimated to cost over $1.9 billion over 30 years, with 90% of it in the first 7 years or so. There are opportunities for US exports which range between 107 and 385 times the proposed grant amount. In addition to the views expressed in the ECOWAS Study, the Consultant believes that there are financing sources suitable for the Project. Regional development banks and multilateral finance organizations have access to capital for this type of regional integration project, although it will need to be supported by private sector sources for the operational concession and the investments in the rolling stock, equipment and buildings. The existing railways in the region have a number of private sector participants most of which financially strong. The Study will not delve into the part of the railway that is in Cote d'Ivoire. Only the Mali segment and in Senegal to evaluate the improvements required for TRANSRAIL railway to accommodate any traffic increase.

## 13. Recommendation

The Consultant shares the conclusion of the ECOWAS Study that the Project is a high priority regional integration project that can be successfully implemented. A key step before that would need to occur to reach that goal is to complete a detailed feasibility study building from the ECOWAS Study. The proposed feasibility study meets the USTDA guidelines and would benefit from USTDA funding support. The Consultant developed a terms of reference in cooperation with USTDA's staff and UEMOA Commission which will bring value to the public financing sources, the host governments, and the private sector strategic partner prospects.

Considering the importance of the Cote d'Ivoire segment of the new railway link, the prohibition for USTDA to fund work in Cote d'Ivoire due to the current political relations with the US, and the desire by UEMOA commission to also study that segment, a solution was discussed with the interested parties.

- The Consultant proposes that the USTDA grant will cover only the work required outside of Cote d'Ivoire, and the recommended Terms of Reference are consistent with this requirement.
- When USTDA develops the Request for Proposal for Contractors to work on the Study, a parallel request for proposal will be issued by the UEMOA Commission that pertains to the Cote d'Ivoire segment and work;
- Contractor proposals will include a proposal for the USTDA RFP, and a separate proposal for the UEMOA RFP pertaining to Cote d'Ivoire;
- The Cote d'Ivoire work will be contracted separately between the UEMOA Commission and the Contractor, and will be paid for by the UEMOA Commission

This approach will ensure the UEMOA Commission can work with the same contractor team and maintain a competitive bidding environment for the Cote d'Ivoire portion of the work. Timelines for the parallel terms of reference work can be coordinated and the overall effort made more efficient. While USTDA cannot support the Cote d'Ivoire segment, the Contractor is not prohibited from working there, and without that segment the new railway in Mali would not succeed in getting implemented.

The Consultant has developed a budget in relation to the USTDA supported Terms of Reference amounting to $751,560. The budget considers a mix of labor categories, including engineers experienced with railway projects, transportation planners, market study consultants, financial specialists, and legal. This budget is viewed sufficient and necessary to complete the tasks developed in the terms of reference. The Consultant recommends that USTDA provide a grant to the UEMOA Commission of $751,560 towards the Study.