

Construction Sector Transparency Initiative – Ethiopia

Pilot Study by the Assurance Team

Report on Information Provided by Ethiopian Roads Authority on Gedo – Mana Begna Road Design Project

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SUMMARY

The Ethiopian Roads Authority has prepared a detailed road design and tender document to upgrade the Gedo – Mana Begna – Lemlem Bereha road. Gedo – Mana Begna – Lelem Bereha, 142 km, is an existing road which level of service has been deteriorating from time to time. Gedo – Mana Begna stretches for 80.5 km from Gedo to Mana Begna and is the first section of the 142 km road. The feasibility study was carried out by Sheladia Associates, Inc. in 2003. Africon Ltd. was appointed in February, 2007, to review the aforementioned feasibility study, to conduct an environmental impact assessment study, to prepare a resettlement action plan, a detailed engineering design and tender documents.

The Ethiopian Roads Authority has disclosed documents demonstrating the procedures followed in awarding the contract for the services ranging from review of feasibility study to tender document preparation.

The consultant required for the service was selected through an international competitive bidding. A two stage bidding procedure was selected where bidders were to be evaluated on the basis of their technical and financial proposals. The approach is believed to provide a balance between tender price and quality of service the consultant is expected to render.

The procurement of the consultant was facilitated by a procurement agent appointed by the Ethiopian Roads Authority prior to the initiation of tendering for this project. The procurement agent prepared the request for proposal and evaluated the technical and financial proposals, subject to approval by the Contract Award Committee and finally by the Director General. However, measures that could have been taken by the Contract Award Committee before or immediately after the technical evaluation were kept until the financial evaluation was completed. The proposal of one of the contenders, which was already known for its inefficiency, was rejected after it emerged winner. This could have been right if considered at short listing stage or at most at the stage of technical evaluation.

The appointment of the procurement agent has been of much help to the Ethiopian Roads Authority; several service and work contracts, which were beyond the capacity of the limited staff, were in line for tendering at this period.

The quality of the consultancy service is managed by the Contracts Implementation Division with due support from relevant sections or divisions. The review of feasibility and EIA is supported by Planning and Programming Division, preparation of detailed engineering design by Design Branch and tender document preparation by Procurement Division.

The consultant carried out the engineering service satisfactorily, according to documents produced and discussions held with the relevant staff of the Ethiopian Roads Authority. However, it has to be noted that there might be capacity limitations within the staff of the client to adequately address design quality issues.

1 Introduction

1.1 Background

- The Construction Sector Transparency Initiative (CoST) is an international multi-stakeholder programme designed to increase transparency and accountability in the construction sector. It is supported by the UK Department for International Development (DFID) and the World Bank and is currently being piloted in seven countries, among which Ethiopia is one. This is made possible by disclosing information at all stages of the construction project cycle, from the initial identification of the project to the final completion.
- Fifteen road projects were selected for pilot study by the National Multi-Stakeholder Group Executive Committee (NMSGEC) of CoST-Ethiopia.
 Gedo Mana Begna Road Design Project is one of such projects upon which Material Project Information (MPI) is collected, verified and analysed.
- The Assurance Team appointed to collect, verify and analyse the information released by the Procuring Entity (PE) consisits of three senior highway engineers. The two team members obtain and assess the information of 2 projects each; the team leader obtains and assesses the information of 1 project on top of his responsibility to coordinate and assist the other team members. This report has been prepared by Ahmed Salih, the team leader who carried out the Gedo Mana Begna project information review.

1.2 Objectives of the Pilot Study

The National Multi-Stakeholder Group has identified four objectives for the pilot studies.

- To learn lessons to inform the design of CoST internationally;
- To learn lessons that improve transparency internationally through the disclosure of material information;
- An enhanced understanding of construction project costs amongst public sector clients, industry and wider society; and
- To learn and share lessons on publicly-funded construction projects' governance.

1.3 Objectives of the Assurance Team

The Assurance Team has the following core objectives.

- To collect the project information from the Procuring Entities (PEs) of CoST to ensure the publication of the relevant Material Project Information (MPI);
- To verify the accuracy and completeness of MPI disclosures on CoST projects;
- To produce reports that are clearly intelligible to the non-specialist, outlining the extent and accuracy of information release for the selected CoST projects;
- To analyse disclosed and verified data in order to make informed judgements about the cost and quality of the built infrastructure on CoST projects; and
- To produce reports that are clearly intelligible to the non-specialist, outlining the findings regarding the program, cost and quality of the infrastructure and highlighting any cause for concern that analysed information reveals on CoST projects.

1.4 Work Carried Out on the Pilot Study

- i. Three assurance teams were assigned to collect, verify and analyse MPI of 15 road projects. A team consists of two team members and a team leader.
- ii. A letter of introduction was written to the PE by the Federal Ethics and Anticorruption Commission, urging the Ethiopian Roads Authority to collaborate in disclosing all required project information to the assurance teams assigned for the task.
- iii. Five projects were assigned for the Assurance Team for collection, verification and analysis of the information released by the PE. Two projects were assigned for each of the team members; the team leader was assigned with one road design project on top of his responsibilities to coordinate the team.
- iv. Requests for disclosure of project data were made but the PE's experts were found reluctant to disclose the required information due to lack of awareness. A meeting was then held with the Deputy Director General of the Ethiopian Roads Authority and five Regional Directors to clarify the mission of the teams and to ease communications. This management team was aware of the initiative of CoST-Ethiopia and pledged to instruct every staff to cooperate with the Assurance Teams. Flow of available information was greatly improved afterwards.
- v. While reviewing the data obtained, discussions were held with individual relevant ERA staff on issues that required further clarifications.
- vi. Documents disclosed focus on evaluation of tender, contract agreement, feasibility and EIA, progress reports, final design report and payment certificates.

1.5 Gedo – Mana Begna Road Design Project

- 1.5.1 Gedo Fincha Lemelem Bereha is an existing gravel road that originates at Gedo town at a junction on Addis Nekempt Assosa trunk road, 175 km west of Addis Ababa, and proceeds in a northerly direction towards Mana Begna and Fincha towns and then towards the sugar factory/plant at Lemlem Bereha. It has a total length of 142 km. The road is characterized by a heavy land slide problem at the escarpment section of the route. Moreover, the road condition has been deteriorating from time to time. This resulted in a marked decrease of traffic, according to ERA's seasonal traffic count. Although remedial measures were taken several times, the road condition went on worsening. Therefore, upgrading the road was sought as the only means of salvation.
- 1.5.2 Gedo Mana Begna is the first 80.5 km section of Gedo Fincha Lemlem Bereha road. The construction of the entire road is planned to be executed in 2 lots by 2 separate contracts: Lot 1 from Gedo to Mana Begna and Lot 2 from Mana Begna to Lemlem Bereha. The design and tender document preparation contract was, however, awarded to one consultant under one contract agreement. Therefore, there is no specific reason to identify Gedo Mana Begna as a separate design project.
- 1.5.3 ERA appointed an international consultant, Africon Limited of South Africa (in association with Yerer Engineering of Ethiopia), for the review of feasibility and EIA study, preparation of resettlement action plan and for the preparation of detailed engineering design and tender documents. International competitive bidding (ICB) was the mode of procurement of the engineering service.
- 1.5.4 The feasibility and environmental impact assessment studies were initially carried out by Sheladia Associates Inc. in 2003. Africon was appointed to review the documents produced by Sheladia, and to prepare detailed engineering design and tender documents of the road. The consultant investigated three more alternative routes to abandon the sliding zone over the escarpment.

2. Verification of Documents

2.1 ERA Procurement Procedures

- i. International Competitive Bidding (ICB) and Local Competitive Bidding (LCB) are the generally applied modes of procurement of the Ethiopian Roads Authority.
- ii. In general terms, LCB is applicable where the service or work is believed to be executed by local capacity and/or where the source of finance is local. ICB is applied on procurement of consultants and contractors where the required service (road design or construction works) is believed to be complex and/or where the source of finance is foreign.
- iii. Despite the preceding argument, consultants or contractors may be appointed to locally financed projects using ICB weighing the nature and complexity of the project.
- iv. The consultancy service of Gedo Mana Begna (or better addressed as Gedo Fincha Lemlem Bereha) Road Upgrading Project was procured on ICB basis. The source of finance for the service was local treasury.

2.2 Project Identification

- i. Feasibility study of the route was conducted by Sheladia Associates Inc. in 2003. The need to upgrade the road to a higher degree was appreciated by the study according to discussions held with ERA staff.
- ii. Africon's review of Sheladia's feasibility study confirmed the need for upgrading of the existing road. Three alternative routes were studied for the stretch beyond Mana Begna in order to avoid the sliding zone at the escarpment section (96 103 km) of the road. The preferred route was submitted to the client, the Ethiopian Roads Authority, for decision. The client decided and notified the consultant to prepare the detailed engineering design including the preferred route.
- iii. AWS Consult, appointed as procurement agent for package 1 projects (including this project), by Ethiopian Roads Authority estimated the cost of the service prior to tendering. The amount of this engineering estimate was Birr 5,882,793. This estimate was entirely based on local procurement; foreign currency component was not incorporated.
- iv. Formal financial agreement was not required as the project was financed from the Ethiopian Government treasury in the form of annual budget allocation.
- v. For an existing road, which requires upgrading to match the level of service anticipated by growing traffic volume, the disclosed documents are satisfactory to identify the project.

2.3 Appointment of Africon Ltd. (in association with Yerer Enginnering)

- i. Documents provided with regard to the appointment of Africon Ltd are listed below.
 - Instruction to bidders
 - Technical evaluation report
 - Financial evaluation report
 - Signed contract agreement including the terms of reference of the assignment and consultant's methodology.
 - Letter of assignment
 - All payment certificates
 - Consultant's progress reports
 - Consultant's completion report
- ii. Africon's assignment is subdivided into 2 distinct phases as shown below.
 - Phase I: Review of Feasibility, Environment Impact Assessment Studies and Preparation of a Resettlement Action Plan.
 - Phase II: Detailed Engineering Design and Tender Document Preparation.
- iii. The cost of the consultancy service is similarly broken down in relation to the activities to be performed under the 2 phases.
 - Phase I: USD 212,460.34 plus Birr 942,000
 Phase II: USD 195,641.74 plus Birr 295,000
 Total: USD 408, 102.08 plus Birr 1,237,000
- iv. In light of the procedures followed to appoint the consultant and comparing the cost of consultancy to the Engineer's estimate, the documents availed to describe the appointment of Africon Ltd (in association with Yerer Engineering) were satisfactory.

2.4 Project Costs

i. Documents showing all payments made for phases I and II have been provided.

- ii. Accordingly, the amount paid to the consultant sums up to USD 408,102.08 and Birr 1, 237,000. The contract amount showed the local component of the payment to be Birr 1,422,550 (including VAT). But as the lead consultant was not registered locally it was found that it was not entitled to VAT payments and Birr 185,000 was deduced.
- iii. The payment made to the consultant is as per the contract agreement. There was no varied order and no additional payment was made.
- iv. The control of costs for the service was satisfactory.

3. Data Analysis

3.1 Approach to Selecting a Consultant

- i. Because of the increasing number of road projects to be tendered for design and works, the Ethiopian Roads Authority decided to outsource service procurements for selecting consultants for 'package II' road projects; these projects were selected for complete feasibility and design studies. AWS Consult was, therefore, commissioned to perform the procurement service as 'procurement agent' to the Ethiopian Roads Authority. This procurement was the procurement agent's first assignment.
- ii. The Ethiopian Roads Authority invited tenders for consultancy service of a suitably qualified consultant for the Review of Feasibility, EIA Studies, Preparation of Resettlement Action Plan, Detailed Engineering Design and Tender Document Preparation for the Gedo Fincha Lemem Bereha Road Upgrading Project. The tender was an international competitive bidding.
- iii. Evaluation of tender was to be a two-stage evaluation; technical proposals accounting for 80% were evaluated first. Then financial proposals of those consultants, which were found above the threshold, were evaluated. The weight for the financial evaluation was 20%. The winner was to be decided by adding up the scores obtained from technical and financial evaluations. The contract will be awarded to the consultant with highest combined score.
- iv. Evaluation criteria for technical proposals were made transparent to all bidders.

3.2 Actual Selection Process

From the documents availed, it was learnt that:

- i. Five consultants form India, Italy, Denmark, South Africa and USA expressed interest to compete for the service. They all collected the request for proposal prepared by ERA.
- ii. Pre-proposal meetings were held with the bidders to clarify issues of concern.
- iii. COWI A/S of Denmark failed to submit its proposal. All others (4) submitted in due time; technical and financial proposals sealed in separate envelopes.
- iv. The bid opening was executed in accordance with the procedures described in the request for proposal witnessed by the Contract Award Committee of the Ethiopian Roads Authority, consultants' representatives and the procurement agent.

- v. The contract Award Committee members signed on each page of the original technical proposals and on the sealed financial proposals of the submissions. The signed documents were directed to be kept under the custody of the chairman of the Contract Award Committee. One additional copy of the technical proposals was left with the Ethiopian Roads Authority and the remaining three copies of the technical proposals were handed over to the procurement agent for evaluation.
- vi. The procurement agent organized an Evaluation Team (ET) comprising a contract engineer (team leader), a transport economist and a highway engineer.
- vii. At the preliminary examination of the proposals, SPAN consultants pvt. ltd. of India was found non-responsive to the Instruction to Bidders. The CPO for bid bond was found addressed to the Director General of the Ethiopian Roads Authority instead of the Authority. Moreover, the CPO was signed by a person who had no power of attorney. Therefore, the ET rejected the proposal of SPAN.
- viii. The proposals of the other three bidders were evaluated and all the three were found qualified for the next stage, financial evaluation.
- ix. The Technical Evaluation Report of the Evaluation Team was approved by the Contract Award Committee. Then the Director General of the Ethiopian Roads Authority approved the Minute of Meeting of the Contract Award Committee.
- x. The Procurement agent was instructed by the Contract Award committee to proceed with the evaluation of the financial proposals of the three bidders and to come up with combined scores (addition of technical and financial evaluation scores) indicating the bidder to be awarded of the contract.
- xi. Financial comparisons were made in Birr. The financial proposals in USD were converted into Birr based on the then official exchange rate.
- xii. After the completion of the financial evaluation, the Evaluation team recommended the contract to be awarded to Techniplan of Italy (in association with Gondowana Consulting Engineers of Ethiopia). The cost of the service proposed by Techniplan was USD 178,590 plus Birr 3,145,020.
- xiii. The Contract Award Committee rejected the Evaluation Team's recommendation based on Techniplan's poor performance. At the period that this evaluation was taking place, Techniplan had an on-going consultancy agreement with the Ethiopian Roads Authority. The Planning and Programming Division of the Ethiopian Roads Authority, the division responsible for the management of the contract, had already written two letters regarding the incompetence of the consultant's staff and, therefore, delay in accomplishing the tasks as set in the contract document to which Techniplan did not respond timely. The Contract Award Committee, therefore, recommended this contract to be awarded to Africon Ltd., the second highest scorer of the bid. The Director General of the Ethiopian Roads Authority approved the recommendation of the Contract Award Committee and the

contract was awarded to Africon Ltd. of South Africa in association with Yerer Engineering of Ethiopia.

- xiv. The agreed cost of the consultancy service was USD 408,102.08 plus Birr 1,422,550.
- xv. Bidders were made to compete both on technical and financial proposals. Awarding consultancy contracts based on a combination of price and quality provides some degree of balance between the tender price for a project and the quality of the service to be provided by the consultant. Such an approach reduces the risk of contract being awarded at an unrealistic price at the expense of quality.
- xvi. Reviewing the procedures of the procurement and taking into account the argument made by the Contract Award Committee we are satisfied on the transparency of the procurement of this consultancy service. However, it must be noted that the rejection of Techniplan could have been effected immediately after the completion of the technical evaluation, prior to opening financial proposals. Moreover, it should not have been included in the short list in the first place. Because the reasons associated with the rejection of the bidder were entirely technical.

3.3 Execution of the Consultancy Service Contract

- i. Africon Ltd. (in association with Yerer Engineering) was assigned with two major tasks planned in two phases.
 - Phase I: Review of Feasibility, Environmental Impact Assessment Studies and Preparation of Resettlement Action Plan.
 - Phase II: Detailed Engineering Design, Preparation of Engineer's Estimate and Tender Document Preparation.
- ii. The consultant not only reviewed but also studied three alternative routes to avoid the sliding zone at the escarpment section of the road. The new route proposed by the consultant was also approved by the Ethiopian Roads authority.
- iii. Environmental Impact Assessment studies were made and a Resettlement Action Plan was prepared and submitted to ERA as per the contract agreement.
- iv. The existing road is of design class DS5 and gravel surface. Based on the feasibility study, a design class of DS4 with asphalt surface was recommended by the consultant. The proposed road class and pavement type was approved by the Ethiopian Roads Authority.
- v. A detailed engineering design for DS4 asphalt road, engineer's cost estimate and tender document were prepared and submitted to ERA.

- vi. All documents were commented in due time. The documents were revised as per the comment forwarded by the Ethiopian Roads Authority.
- vii. The Contract Implementation Division, which managed the consultancy contract, has already sent the newly prepared tender document to the Procurement Division. The project is now on the verge of tendering for construction works.
- viii. After reviewing documents and holding discussion with relevant staff of the Ethiopian Roads Authority, we express that we are satisfied with the service rendered by the consultant.

4 Recommendation

During the period of this study it was observed that ERA staff were in trouble to find required documents. This is owed to both high staff turn over and poor filing system. It was not uncommon to see rooms full of documents, floor to roof. It is hectic and sometimes impossible to locate a certain document. Therefore, the Assurance Team believes that it is high time that ERA transforms its archive into electronic system.

APPENDICES

Appendix 1 Material Project Information

Project identification	Project purpose	To improve the level of service of the existing road
	Location	175 km west of Addis Ababa
	Intended beneficiaries	57.732
	Specification	Review of feasibility study, EIA studies, resettlement action plan, detailed engineering design and tender document preparation
Funding	Budget	Birr 5,882,793 estimated in April, 2007
Tender process	Tender procedure	Africon Ltd in association with Yerer Engineering appointed following the evaluation of technical and financial proposals
	Name of lead consultant	Africon Ltd
Contract award	Name of lead consultant	Aficon Ltd
	Contract price	USD 408,102 plus Birr 1,422,550 (or Birr 5,007,645.15 converting USD to Birr)
	Contract scope of work	Set out in Contract Data and Africon's proposal
	Contract programme	February 2007 – November 2007 (excluding the period for topographic survey)
Contract execution	Changes to contract price, programme, scope with reasons	No increase in contract price; completion delayed until February 2009
Post contract completion details	Actual contract price	USD 408,102 plus Birr 1,422,550
	Total payments made	USD 396,102.08 (excluding flight reimbursable USD 12,000) plus Birr 1,237,000 (excluding 15% VAT)
	Actual contract scope of work	Original specification plus survey of alternative routes
Tender evaluation report	Prepared by: Procurement Agent	Approved by: Contract Award Committee and the Director General of ERA.
Project completion report	Prepared by: Consultant	Dated: February 2009.

Appendix 2 Documents disclosed

Document title	Date produced
Final Report on Feasibility and EIA	October 2007
Technical Evaluation Report for Review	September 2006
of Feasibility, EIA study, RAP, Detail	
Engineering Design and Tender	
Document Preparation for Gedo – Fincha	
 Lemlem Bereha Upgrading road Project 	
Financial Evaluation Report for Review	October 2006
of Feasibility, EIA study, RAP, Detail	
Engineering Design and Tender	
Document Preparation for Gedo – Fincha	
 Lemlem Bereha Upgrading road Project 	
Contract Document of Consultancy	February 2007
Services for Review of Feasibility, EIA	
study, RAP, Detail Engineering Design	
and Tender Document Preparation for	
Gedo – Fincha – Lemlem Bereha	
Upgrading road Project	
Final Consultancy Completion Report	February 2009
Payment Certificate I	May 11, 2007
Payment Certificate II	August 29, 2007
Payment Certificate III	March 3, 2008
Payment Certificate IV	June 10, 2009
Payment Certificate V	June 23, 2009
Payment Certificate VI	February 4, 2010

Contract Item	Description
Contract Name	Consultancy Services for Review of
	Feasibility and EIA study, RAP, Detaied
	Engineering Design and Tender
	Document Preparation for Gedo – Fincha
	– Lemlem Bereha Upgrading Road
	Project
Contract Number	S/10/06
The Employer / Contracting Authority	Ethiopian Roads Authority
Financier	Ethiopian Government
The Engineer / Consultant	Africon Ltd.
Original Contract Price	USD 408,102.08 plus
	Birr 1,422,550
Revised Contract Price	None
Amount paid to date	USD 396,102.08 (excluding 12,000 flight
	reimbursable) plus
	Birr 1,237,000 (excluding !5% VAT) paid
	until February 2010.
Original Contract Period(days)	270 calendar days (excluding days
	required for topographic surveys)
Extension of Time to date(days)	420 calendar days including the period for
	topographic survey
Key Dates	Contract signing: 2 February, 2007 Commencement Date: 16 February, 2007 Original Completion Date: November 15, 2007 Revised completion date: February 2009
	1

Appendix 3 Contract Data for Consultancy Contract