

## TABLE OF CONTENTS

LIST OF ACRONYMS.....	1
Template for collecting Material Project Information from procuring entities.....	2
EXECUTIVE SUMMARY .....	8
1.0 INTRODUCTION AND STUDY BACKGROUND.....	9
2.0 METHODOLOGY .....	11
2.1 Selection of Projects .....	11
2.2 Data Collection .....	11
2.3 Data Verification.....	11
2.4 Data Analysis .....	12

## LIST OF ACRONYMS

AT	Assurance Team
CoST	Construction Sector Transparency Initiative
DFID	Department for International Development
MDF	Malawi Defence Forces
MHC	Malawi Housing Corporation
MMSG	Malawi Multi Stakeholder Group
MPI	Material Project Information
NCIC	National Construction Industry Council
NRWB	Northern Region Water Board
ODPP	Office of the Director of Public Procurement
OFID	Opec Fund for International Development
PEs	procurement Entities
RA	Roads Authority

### Template for collecting Material Project Information from procuring entities

This template has been developed to assist Multi-stakeholder Groups in collecting Material Project Information from procuring entities on projects that are included in the on-going disclosure process. The template could be available on line and the procuring entity be asked to update it on a regular basis.

Stage of project cycle	List of MPI to be disclosed	Project name: Rehabilitation, Upgrading & Expansion Works for Mzuzu Water Supply Scheme Contract: NRW/W/01B  Procuring Entity: Northern Region Water Board (NRWB)  Client (if different):	Key Findings by the Assurance Team
Project identification	Project purpose	To provide Mzuzu residents with adequate potable water supply	
	Location	Mzuzu City, Northern Malawi	
	Intended Beneficiaries	Local businesses, industry, institutions, and general public	
	Specification	Rehabilitation and upgrading of transmission pipe lines	
	Feasibility study	Conducted (Same Study as NRW/W/01)	
Funding	Financing agreement	Between Opec Fund for International Development (OFID) and Government of Malawi	
	Budget	A budget for the works was prepared in 2008 totalling MK1,336,889,831.31.	However, due to financial constraints, the works were sub-divided into 3 phases:  Phase 1/Lot 1: Mk577,595,443.95  Phase 1/Lot 2:

Stage of project cycle	List of MPI to be disclosed	<b>Project name:</b> Rehabilitation, Upgrading & Expansion Works for Mzuzu Water Supply Scheme Contract: NRWB/W/01B  <b>Procuring Entity:</b> Northern Region Water Board (NRWB)  <b>Client (if different):</b>	<b>Key Findings by the Assurance Team</b>
	Engineer's estimate	The Engineer's Estimate was almost similar to the prices offered by Bidders. MK441,626,448.73.	MK296,069,517.08  Phase II: MK463,224,870.28  <ul style="list-style-type: none"> <li>• The corrected bid for the lowest evaluated bidder - Plem Construction – H.E. Jackson JV was MK478,690,082.01;</li> <li>• compared with the engineer's estimate, this bid was 8% higher.</li> <li>• The main reason for the bids being close to the cost estimate was that the cost estimate was revised based on the rates in the bids for contract NRWB/W/01.</li> <li>• On reviewing the evaluation report, the Government and OFID allowed the project to be implemented.</li> </ul>
Tender process (contract for project supervision)	Tender procedure	Quality, Cost Based Selection (QCBS)	<b>Note: The project was divided into phases due to funding arrangement. The consultant selected for phase 1 designed the whole project, i.e. Phase I and Phase II.</b>
	Number expressing interest	20	
	Number shortlisted	6	

Stage of project cycle	List of MPI to be disclosed	<b>Project name:</b> Rehabilitation, Upgrading & Expansion Works for Mzuzu Water Supply Scheme Contract: NRWB/W/01B  <b>Procuring Entity:</b> Northern Region Water Board (NRWB)  <b>Client (if different):</b>	Key Findings by the Assurance Team
	Number submitting tender	4	
Tender process (main contract for works)	Tender procedure	ICB: (a) preliminary evaluation based on qualification information; (b) Detailed examination of cost; (c) Post qualification evaluation including capacity of qualifying bidders.	
	Number expressing interest	8	
	Number shortlisted	n/a	
	Number submitting tender	3	
	List of tenderers	Dore & Pitt – Irrigwater JV  Plem Construction – HE Jackson JV  Hydrowater Well – United Chemolide Industries JV	
Tender evaluation report	Disclosed		
Contract award (project supervision)	Name of main consultant	Metaferia Consulting Engineers	
	Contract price	Phase 1: Design: \$275,465.63  Phase II: Supervision:	

Stage of project cycle	List of MPI to be disclosed	<b>Project name:</b> Rehabilitation, Upgrading & Expansion Works for Mzuzu Water Supply Scheme Contract: NRWB/W/01B  <b>Procuring Entity:</b> Northern Region Water Board (NRWB)  <b>Client (if different):</b>	Key Findings by the Assurance Team
		\$144,647.50	
Contract award (main contract for works)	Contract scope of work	Design and supervision of the Supply, Installation and Construction of priority rehabilitation, upgrading and expansion works for Mzuzu Water Supply Scheme.	
	Contract programme	9 months Design; 8 months supervision	
	Name of main contractor	Plem Construction Ltd & HE Jackson JV	
	Contract price	MK487,090,082.01	
Contract Execution (project supervision)	Contract scope of work	The scope of works involves supply and installation of 36,600m long pipelines with diameter ranging from 63mm to 400mm and other related activities	<ul style="list-style-type: none"> <li>• The design phase of the project commenced on 11 July 2007 and original completion date was 11 April 2008 for duration of 9 months.</li> <li>• Due to increased scope of</li> </ul>
	Contract programme	8 Months construction & 12 Months Defects Liability Period.	

Stage of project cycle	List of MPI to be disclosed	<b>Project name:</b> Rehabilitation, Upgrading & Expansion Works for Mzuzu Water Supply Scheme Contract: NRWB/W/01B  <b>Procuring Entity:</b> Northern Region Water Board (NRWB)  <b>Client (if different):</b>	<b>Key Findings by the Assurance Team</b>
			design works (it was assumed that the works to be designed would be for US\$ 3.3 million but it turned out to be US\$ 18.5 million), the period was extended for 7 months and completion was on 8 <sup>th</sup> November 2008. <ul style="list-style-type: none"> <li>• The design phase did not attract additional costs.</li> <li>• Supervision Contract Start Date: 1 Feb 2010</li> <li>• Supervision Completion Date: 30 Sept 2010</li> <li>• Duration: 8 Months</li> </ul>
Contract Execution (Main contract for works)	Individual significant changes to the contract which affect the price with reasons	No significant changes had been made to the works contract as at the time the research was undertaken.	The contract has no contingency sum which may affect the budget should there be a requirement to vary the works. It is noted that the Engineer's Estimate and the client's budget included a contingency sum of 15%.
	Individual significant changes to the contract which affect the programme, with reasons	No extension of Time applied for on this contract. Scope of works remains as originally envisaged.	
	Details of any re-award of main	N/a	

Stage of project cycle	List of MPI to be disclosed	Project name: Rehabilitation, Upgrading & Expansion Works for Mzuzu Water Supply Scheme Contract: NRW/W/01B  Procuring Entity: Northern Region Water Board (NRWB)  Client (if different):	Key Findings by the Assurance Team
	contract		
Post contract completion details (main contract for works)	Actual contract price	Not yet known	
	Total payments made	MK304,461,187.02 as at 30 June 2010 representing 63% progress; Time elapsed: 67%	
	Actual contract scope of work	Minor change orders to original specification to cover changed works.	
	Actual contract programme	Original start 1 <sup>st</sup> February 2010; Completion 30 September 2010.	
	Project evaluation reports (on completion and on-going)	N/a	
<b>Documents disclosed</b>	<b>Disclosure status</b>		
Feasibility study	Disclosed		
Financing agreement	Disclosed		
Specification	Disclosed		
Tender evaluation report	Disclosed		
Project evaluation reports	Not yet complete		



## EXECUTIVE SUMMARY

This report summarises the initial findings by EMC Jatula Associates; who were selected as the Assurance Team (AT) to collect data from participating procurement entities (PEs) in the CoST Initiative. Northern Region Water Board participated in the study whose aim is to increase transparency and accountability in the Malawi construction sector.

### **Northern Region Waterboard (NRWB)**

The Northern Region Water Board embarked on improving water supply for residents in Mzuzu City in order to improve supply to the city. A total budget of MK1,336,889,831.31 was proposed but due to financial constraints, the World Bank could not finance the whole amount. Therefore the works were sub-divided into phases. This report covers Phase II works.

The AT collected adequate data on this project, apart from that compiled on the MPI, which is supported by detailed source documents. In this respect, Addenda, variation Orders, Bills of Quantities, payment records, specifications, and other pertinent documentation were collected and verified through the consultant and/or the contractor. The information thus collected on this project is therefore complete and accurate.

### **Rehabilitation, Upgrading & Expansion Works for Mzuzu Water Supply Scheme Contract: NRW/W/01B**

#### **Contractor: Plem Construction – H.E. Jackson JV**

Phase II of the programme to improve water supply in the City of Mzuzu, the scope of works involves supply and installation of 36,600m long pipelines with diameter ranging from 63mm to 400mm and other related activities

An engineer's estimate was prepared and the total was MK441,626,448.73. The tender amount was MK487,090,082.01. Compared with the engineer's estimate, this bid was 8% higher. The main reason for the bid being close to the cost estimate was that the cost estimate was revised based on the rates in the bids for Phase I contract NRW/W/01.

The AT made the following observations when the study was carried out:

- No significant changes had been made to the works contract as at the time the research was undertaken.
- The contract has no contingency sum which may affect the budget should there be a requirement to vary the works. It is noted that the Engineer's Estimate and the client's budget included a contingency sum of 15%.
- The works are being carried out in accordance with the specifications.

## 1.0 INTRODUCTION AND STUDY BACKGROUND

This report covers the work carried out by EMC Jatula associates as the selected Assurance Team to collect Material Project Information (MPI) from selected Procurement Entities (PEs). It highlights all the activities carried out by the Assurance Team during the period under review and includes both achievements and constraints.

The Construction Sector Transparency (CoST) Initiative is an international multi-stakeholder programme which is designed to increase transparency and accountability in the construction sector. The programme is supported by the UK Department for International Development (DFID) and the World Bank.

Malawi was selected to undertake a pilot for this programme as one of seven countries in the world. The programme is being administered by the National Construction Industry Council (NCIC) on behalf of the Construction Sector Transparency Initiative (CoST) Malawi Multi Stakeholder Group (MMSG).

The programme aims at enhancing the accountability of Procuring Entities (PEs) and construction companies for the cost and quality of public sector construction projects. Each PE selected to provide data will do this by disclosing to the public 'Material Project Information' (MPI) at all stages of the construction project cycle, from the initial identification of the project to the final completion.

The main aim for CoST is about increasing transparency through the release of project information into the public domain. It is however recognised that the disclosure of this information may not be sufficient on its own to achieve greater accountability as some of the information is most likely to be complex and not easily understandable to the general public.

EMC Jatula Associates Consulting Engineers were therefore selected to undertake this study to ensure that the information that is released is both accurate and available in a form that can easily be understood by stakeholders. Part of our brief is to ensure that the disclosed information must be verified, analysed and interpreted by experts as an 'Assurance Team' appointed specifically for this purpose. The major role to be played by EMC Jatula Associates as the consultant on this pilot project is to act as an interpreter at all the assurance processes to help make raw data disclosures more understandable to all stakeholders.

Hence the objectives of the pilot programme to be achieved by EMC Jatula Associates are as follows:-

- To assist the MMSG to liaise with the Procuring Entities (PEs) of projects involved in the CoST initiative to ensure the publication of the relevant Material Project Information (MPI);
- To verify the accuracy and completeness of MPI disclosures on all or a subset of projects involved in the CoST initiative, as required by the MMSG;

- To analyse the disclosed and verified data on all or a subset of projects involved in the CoST initiative in order to make informed judgements about the cost and quality of the built infrastructure;
- To produce reports that are clearly understandable to the non-specialist, outlining the extent and accuracy of information released on projects involved in the CoST initiative and highlighting any causes for concern that the analysed information reveals.

## 2.0 METHODOLOGY

### 2.1 Selection of Projects

The Malawi MSG selected 3 (three) institutions which are participating as PEs to provide MPI under the CoST Initiative. The following are the institutions together with a list of the respective projects for which information has been released:

#### **Malawi Housing Corporation (MHC):**

1. MHC/01/09 - Chilumba
2. MHC/2008/03/Lilongwe

#### **Northern Region Waterboard (NRWB)**

1. NRW/W/01
2. NRW/W/01B

#### **Malawi Roads Authority (RA):**

1. 4T/PP/NR/RU/KA/09
2. 3T/RM/CR/KU/DA/MC/NS/09
3. 4T/PP/SR/BLK,MH,MHG,ZA/09
4. 102U/REHAB/SR/BTC/08 LOT 2
5. 121U/REH/CR/LLC/08 LOT 3

### 2.2 Data Collection

#### **Northern Region Waterboard (NRWB)**

The AT planned to collect data for the Northern Region week of 4<sup>th</sup> July 2010. Visits Northern Region Water Board were conducted and EMC Jatula Associates faced no hindrances whatsoever from the NRW.

After collecting data, a site visit to evaluate whether the works were being constructed in accordance with specifications was planned but due to foul weather, it was not possible to carry out a proper site inspection in the rains. The site visit was therefore deferred to the following week and was conducted successfully.

### 2.3 Data Verification

EMC Jatula Associates were given the responsibility to collect data and verify that the MPI is both complete and accurate. The AT therefore collected as much information as possible and verification was done using the consultant's as well as the contractor's documents.

## **Northern Region Waterboard (NRWB)**

EMC Jatula Associates were given unfettered access to information on the two NRW projects being undertaken in Mzuzu town.

The AT found that record keeping at NRW is meticulous and cannot be compared with any other institution in the study. All the required information was obtained and cross-checked to ensure completeness and its accuracy and the AT could not find any deviations.

All necessary comparisons have been made and the findings made available in the appropriate sections of this report.

## **2.4 Data Analysis**

### **Rehabilitation, Upgrading & Expansion Works for Mzuzu Water Supply Scheme Contract: NRWB/W/01B**

**Contractor: Plem Construction – H.E. Jackson JV**

#### **Funding**

A feasibility study was conducted and the NRW sought Government's assistance for financing the project. Malawi Government entered into an agreement with Opec Fund for International Development (OFID) to finance the works. A total budget of MK1,336,889,831.31 was proposed but due to financial constraints, the World Bank financed part of the works and OFID was approached to fund the rehabilitation, upgrading and expansion Works for Mzuzu Water Supply Scheme Phase II; Contract No. NRWB/W/01B. Therefore the works were sub-divided into phases.

An engineer's estimate was prepared and the total was MK441,626,448.73. Subsequently, the NRW advertised for the works to be tendered. Fourteen firms expressed an interest in tendering for the works, and five firms submitted bids. The firms submitting bids were:

#### **Tender procedure**

The tender procedure used was International Competitive Bidding. NRW examined the bids and prepared a tender evaluation report which was disclosed to the AT. Plem Construction – HE Jackson JV were evaluated as the lowest evaluated bidder. The tender amount was MK487,090,082.01. Compared with the engineer's estimate, this bid was 8% higher. The main reason for the bid being close to the cost estimate was that the cost estimate was revised based on the rates in the bids for contract NRWB/W/01. On reviewing the evaluation report, the Government and OFID allowed the project to be implemented.

### **Contract Scope of Works**

The scope of works involves supply and installation of 36,600m long pipelines with diameter ranging from 63mm to 400mm and other related activities

### **Contract programme**

The duration for the contract is 8 months with 12 months Defects Liability Period. Commencement of the contract was on 1 February 2010 and completion is planned for 30 September 2010.

### **Significant Changes to Works Contract price and Programme**

No significant changes had been made to the works contract as at the time the research was undertaken. However, the contract has no contingency sum which may affect the budget should there be a requirement to vary the works. It is noted that the Engineer's Estimate and the client's budget included a contingency sum of 15%.

Total payments made as at the time of the study were MK304,461,187.02 or 63% of the contract sum. Time elapsed was 67% of the duration of the contract.

No Extension of Time has been applied for on this contract. Scope of works remains as originally envisaged.

### **Supervision Contract**

The NRWB advertised for supervision of the works using the Quality and Cost Based Selection (QCBS) procedure. Twenty firms expressed an interest in tendering for the works and six were shortlisted. However, only four firms submitted tenders. Metaferia Consulting Engineers were successful and were awarded the supervision contract. The duration of the contract was 8 months with a Defects Liability period of 12 months.

The works were for Design and supervision of the Supply, Installation and Construction of priority rehabilitation, upgrading and expansion works for Mzuzu Water Supply Scheme.

### **Significant Changes to Supervision Contract price and Programme**

The design phase of the project commenced on 11 July 2007 and original completion date was 11 April 2008 for duration of 9 months. Due to increased scope of design works (it was assumed that the works to be designed would be for US\$ 3.3 million but it turned out to be US\$ 18.5 million), the period was extended for 7 months and completion was on 8<sup>th</sup> November 2008. The design phase did not attract additional costs.

Supervision Contract Start Date: 1 Feb 2010

Supervision Completion Date: 30 Sept 2010

Duration: 8 Months

The contract price was split into two phases as follows:

Phase 1: Design: \$275,465.63

Phase II: Supervision: \$144,647.50

#### **Disclosures**

The NRWB have made all the required disclosures including Feasibility study, Financing Agreement, Specifications, and Tender Evaluation Report.

### **3.0 CONCLUSIONS**

The AT was given maximum access to NRWB. Record keeping at this institution is very good. There were no issues of concern pertaining to this contract noted by the AT apart from the omission of contingency in the Works Contract which has been highlighted in this report in the appropriate sections.