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# 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: Patching, Slurry Sealing & Drainage Works in Zomba, Mangochi, Machinga, & Balaka Districts. Contract No. 4T/PP/SR/BLK,MH,MHG, ZA/09 Procuring Entity: Roads Authority Client (if different)	Key Findings by the Assurance Team
Project identification	Project purpose	To Improve transportation in various districts in the Southern Region of Malawi	
	Location	Zomba, Mangochi, Machinga, & Balaka Districts, Southern Malawi	
	Intended Beneficiaries	Local businesses, commuters, farmers, and the general public	
	Specification	Pothole patching, slurry sealing and drainage works	
	Feasibility study	NOT APPLICABLE TO REHABILITATION PROJECTS	
Funding	Financing agreement	Roads Authority and Road Fund Administration.	
	Budget	N/A	
	Engineer's estimate	MK51,503,920.00	
Tender process (contract for	Tender procedure	National Competitive Bidding; Open Tender	
project supervision)	Number expressing interest	N/A	

Stage of project cycle	List of MPI to be disclosed	Project name: Patching, Slurry Sealing & Drainage Works in Zomba, Mangochi, Machinga, & Balaka Districts. Contract No. 4T/PP/SR/BLK,MH,MHG, ZA/09 Procuring Entity: Roads Authority Client (if different)	Key Findings by the Assurance Team
	Number shortlisted	N/A	
	Number submitting tender	6	
Tender process (main	Tender procedure	National Competitive Bidding; Open Tender Procedure	
contract for works)	Number expressing interest	5	
	Number shortlisted	NA	
	Number submitting tender	5	
	List of tenderers	F&LK Civil Engineering Contractors Mtima Construction Cas Civil Engineering Hema Construction Wasi Civil Engineering	
	Tender evaluation report	DISCLOSED	
Contract award (project	Name of main consultant	Mphizi Consulting Engineers	
supervision)	Contract price	MK81,254,690.00	
	Contract scope of work	Supervision of Patching, slurry sealing, and drainage Works	
	Contract programme	12 months works; 12 months defects Liability period. Start: 5 October 2009; Completion: 4 October 2010	
Contract	Name of main	Wasi Civil Engineering	

Stage of project cycle	List of MPI to be disclosed	Project name: Patching, Slurry Sealing & Drainage Works in Zomba, Mangochi, Machinga, & Balaka Districts. Contract No. 4T/PP/SR/BLK,MH,MHG, ZA/09 Procuring Entity: Roads Authority Client (if different)	Key Findings by the Assurance Team
award (main contract for	contractor		
works)	Contract price	MK44,088,662.50	
	Contract scope of work	Patching, slurry sealing, and drainage works	
	Contract programme	365 Days	<ul> <li>Duration was subsequently changed to 286 days.</li> <li>Project was scheduled to be completed on 30<sup>th</sup> June 2010, end of financial year</li> </ul>
Contract Execution (project supervision)	Significant changes to contract price, programme, scope with reasons	No significant changes to contract	
Contract Execution (Main contract for works)	Individual significant changes to the contract which affect the price with reasons	The Consultant issued an Addendum on 10 <sup>th</sup> January 2010 increasing the contract sum by MK6,613,299.38; or 15%. Site clearance items were omitted, Drainage works were reduced, Sub base work was reduced in scope, surfacing works were increased, concrete works were increased, miscellaneous items for structures were omitted, contingency amount of MK5,029,124.99 was all used.	<ul> <li>The justification for the addendum was that heavy rains resulted in development of numerous potholes which needed attention and therefore surfacing works were increased. (See main report for further details)</li> <li>AT notes below some quantity increases that were made after the Addendum to the Contract due to re-assessment of quantities arising from the prolonged rainy season in the southern Region resulting in more potholes which necessitated more 40 mm pothole patching:</li> <li>Certificate No. 7 for May 2010 includes 5,386.92m2 of 40mm patching. Addendum dated 28 January 2010 has a quantity of 2,800m2.</li> <li>Certificate No. 7 for May 2010 includes 1,731.41m2 of 25mm patching. Addendum dated 28 January 2010 has a quantity of</li> </ul>

Stage of project cycle	List of MPI to be disclosed	Project name: Patching, Slurry Sealing & Drainage Works in Zomba, Mangochi, Machinga, & Balaka Districts. Contract No. 4T/PP/SR/BLK,MH,MHG, ZA/09 Procuring Entity: Roads Authority Client (if different)	Key Findings by the Assurance Team
			1,333m2. On 18 <sup>th</sup> May 2010, the consultant wrote a letter to client revising completion date from 30 June 2010 to 21 September 2010. The extension of time was not approved. New item of 'Grading' introduced; rate submitted to client for approval. No budget was allowed for this item when Addendum was issued on 28 <sup>th</sup> January 2010. This item was requested by the consultant in error; hence the client did not provide a budget for this item.
	Individual significant changes to the contract which affect the programme, with reasons	Duration of contract changed to 286 days in lieu of 365 days with no justification.	Award letter shows contract duration of 365 days. However, contract correspondence shows contract duration of 286 days. Although at tendering the contract duration was indicated to be for 12 months the completion date was fixed to 30 <sup>th</sup> June of the next financial year, this was clearly explained to all the contractors during contract negotiations. It should be noted that although the contract durations for pothole patching contracts are set at 12 months the budget is normally exhausted by April each financial year due to high number of potholes which develop during the rainy season.

Stage of project cycle	List of MPI to be disclosed	Project name: Patching, Slurry Sealing & Drainage Works in Zomba, Mangochi, Machinga, & Balaka Districts. Contract No. 4T/PP/SR/BLK,MH,MHG, ZA/09 Procuring Entity: Roads Authority Client (if different)	Key Findings by the Assurance Team
	Details of any re-award of main contract	N/A	
Post contract completion	Actual contract price	Final Account not known; project still in progress	
details (main contract for works)	Total payments made	MK47,929,371.02 up to 31 <sup>st</sup> May 2010.	
wonksy	Actual contract scope of work	Reductions and increases in individual items made, but contract sum maintained, contingency sum being expended but pending client's approval.	
	Actual contract programme	Extension of time sought for completion of 21 September 2010	Contractor gave early warning about delays due to national fuel shortage and breakdown of only quarry in the southern region operating on a commercial basis. Contract to end on 30 <sup>th</sup> June 2010, extension not approved.
	Project evaluation reports (on completion and on-going)	Not yet done.	

Documents disclosed	Disclosure status
Feasibility study	Not applicable
Financing agreement	Disclosed
Specification	Disclosed
Tender evaluation report	Disclosed
Project evaluation reports	Not completed yet

# 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. The Roads Authority participated in the study whose aim is to increase transparency and accountability in the Malawi construction sector.

# Roads Authority Projects

Generally, the AT observed that the RA has a policy for maintenance contracts for variations not to exceed 15% of the original contract sum, unless there are extenuating circumstances to warrant increases above this percentage. On all RA projects studied under the CoST Initiative, therefore, increases to the contracts were within this threshold. Mostly, Extensions of Time were awarded without cost to allow contractors to complete the works. Individual project observations are summarised under each project report.

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.

## Patching, Slurry Sealing & Drainage Works in Zomba, Mangochi, Machinga, & Balaka Districts.

## Contract No. 4T/PP/SR/BLK,MH,MHG,ZA/09 Contractor: Wasi Civil Engineering

## Consultant: Mphizi Consulting Engineers

It is noted that the Mphizi Consulting Engineers' supervision contract includes a considerable number of other works contracts within the project location or zone. Hence, the contract sum is not for the supervision of only one pothole patching project in Southern region. Rather, the consultant was covering other works projects under the same contract which are not the subject of this Assurance Consultancy.

## Works Contract

This project was estimated to cost MK51,503,920.00. It was however awarded to Wasi Civil Engineering at MK44,088,662.50.

The AT noted the following significant variations to the contract: -

An Addendum was issued and justified to facilitate payment for an increase in quantities resulting from heavy rains experienced in most parts of the country during the 2009/2010 season. The net increase in the contract value was MK6,613,299.38 which increased the contract sum to MK50,701,961.88.

- The consultant included an amount of MK940.40 as a provision for escalation of materials and other inputs on a contract worth MK50,701,961.88; which is, in the view of the AT, not realistic. In the event that the contractor claims for increased cost of inputs, the client shall be requested to make payment for items which were not budgeted for by the consultant.
- A total of MK13,236,634.80 has been paid through the contract for road surfacing items over and above the quantities approved in Addendum No. 1. Total payments to 31 May 2010 are at MK47,929,371.02 whilst the Addendum is MK50,701,961.88; meaning that the allowed total value for the works has not been exceeded.
- A new item of 'Grading' has been introduced. However, no estimated quantity for grading has been included in the Addendum. This work was included in error by the consultant and the client included no budget for it.
- To date, there have not been any significant changes to the supervision contract as it is tied to the works contract.

The AT was given access to the Roads Authority and found no difficulties in obtaining the data. Record keeping at this institution is good.

# 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. NRWB/W/01
- 2. NRWB/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

## Malawi Roads Authority (RA):

The AT visited the Regional Office of the RA in Blantyre to collect data on the project for Patching, Slurry Sealing & Drainage Works in Zomba, Mangochi, Machinga, & Balaka Districts; Contract No. 4T/PP/SR/BLK being constructed by **Wasi Civil Engineering**.

## 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 from the three participating institutions. This report however highlights the findings of the above project No. **4T/PP/SR/BLK** in Southern Region of Malawi.

# 2.4 Data Analysis

Patching, Slurry Sealing & Drainage Works in Zomba, Mangochi, Machinga, & Balaka Districts.

Contract No. 4T/PP/SR/BLK,MH,MHG,ZA/09

Contractor: Wasi Civil Engineering

#### **Project Details**

The purpose of the project is to improve the service of transportation by reducing travel time improving on comfort and reduction of wear and tear in vehicle Maintenance. It is intended to benefit the residents of the Southern Region and Malawi Nation and the International transporters to Tanzania, Mozambique, Zambia and further countries.

#### Funding

The Roads Authority (RA) and Road Fund Administration (RFA) have a financing agreement for the RFA to fund RA annual programmes.

Generally these types of maintenance programmes do not require feasibility studies to be conducted. However, the client institutes engineer's estimates for planning purposes. This project was estimated to cost MK51,503,920.00.

## Tender procedure

Following the initial estimates, the client floated tenders and the procedure was National Competitive Bidding and Open Tendering. This means that any eligible qualifying entity can obtain tender documents and participate in the process without any hindrance. Five firms obtained the tender documents and submitted bids:

- F&LK Civil Engineering Contractors
- Mtima Construction
- Cas Civil Engineering
- Hema Construction
- Wasi Civil Engineering

The lowest evaluated bidder, Wasi Civil Engineering were awarded the contract at the sum of MK44,088,662.50

## Works Contract programme

The works contract commenced on 21 October 2009 and was planned for completion on 30 June 2010.

At the time of the study in July 2010, the works were still on-going.

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

On 3<sup>rd</sup> March 2010, the Consultant wrote to the contractor submitting Addendum No. 1. The Addendum was justified to facilitate payment for an increase in quantities resulting from revision of Bills of Quantities based on conditions existing at the time. Due to damage caused by heavy rains experienced in most parts of the country during the 2009/2010 season, it became necessary to accommodate the envisaged additional road patching works in order to maintain the roads under this project in a serviceable and safe condition.

Table No. Wasi (1) shows the Addendum summarised to show the main changes which were effected in order to increase patching quantities. In order to achieve additional patching, it became necessary to omit site clearance, drainage, gravel, and masonry items amounting to an omission of MK4,240,499.90 in total. Against this omission, the consultant increased the value of concrete works and surfacing works totalling MK14,233,190.00. The gross increase in quantities therefore was MK9,992,690.10. The consultant therefore used all the contingencies in the contract and therefore the net increase in the contract value was MK6,613,299.38 (Refer to Table No. Wasi (2) below. The contract was therefore increased from MK44,088,662.50 to MK50,701,961.88.

The changes to the contract are summarised as follows:

Item	Description	Omissions	Additions	Amount (MK)
	Original Contract			44,088,662.50
2		2,030,000.00		,,
3	Drainage	1,772,075.90		
4	Gravel	385,000.00		
5	Concrete works		1,871,750.00	
6	Masonry	53,424.00		
7	Surfacing Works		12,361,440.00	
8	Total Additions to Contract	4,240,499.90	14,233,190.00	9,992,690.10
				54,081,352.60
9	Usage of Contingency			(5,029,124.99)
10	Surtax			1,648,793.87
11	Escalation			940.40
12	Revised Contract Value			50,701,961.88

Table No. Wasi(1) - Revised Contract Sum

As seen from the above Table No. Wasi (1), the consultant included an amount of MK940.40 as a provision for escalation of materials and other inputs in this contract. During the period of execution of the contract, the AT is aware that some inputs notably fuel, cement, and bitumen have increased. Although the contractor had not claimed for increased costs of inputs by the time

the study was conducted, it is more than likely that claims shall be made. In that event, the client shall be requested to make payment for the increase when it was not budgeted for by the consultant. The consultant should have given the client proper advice in the management of the contract in this regard. It would appear from the above Table No. Wasi (1), that the sum of MK940.40 was a balancing sum and not intended to be a provision for escalation.

		ORIGINAL			REVISED					
ltem No.	Description	Tender Quantity	Unit	Rate	Amount	Revised Quantity	Unit	Rate	Amount	Total Price Variation
1	2	3	4	Kt 5	K t 6	7	8	K t 9	K t 10	K t 10-6
1.00	GENERAL									
1.01	Contractor's establishment	1.00	Sum	558,000.00	558,000.00	1.00	Sum	558,000.00	558,000.00	-
1.03	Provision of survey Equipment	1.00	Mth	60,000.00	60,000.00	1.00	Mth	60,000.00	60,000.00	-
1.05	Provision of laboratory equipment	6.00	Sum	80,000.00	480,000.00	6.00	Sum	80,000.00	480,000.00	-
1.06	Provison for Project Sign Boards	2.00	No.	50,000.00	100,000.00	2.00	No.	50,000.00	100,000.00	-
1.07	Traffic Accommodation	1.00	Sum	125,000.00	125,000.00	1.00	Sum	125,000.00	125,000.00	-
2.00	SITE CLEARANCE AND EARTHWORKS									
2.05	Preparing road side drains (ditches) (per side)	10.00	Km	125,000.00	1,250,000.00	-	Km	125,000.00	-	(1,250,000.00)
2.07	Excavation and disposal	1,000.00	Cu m	780.00	780,000.00	-	Cu m	780.00	-	(780,000.00)
2.11	Grading	-	km	140,000.00	-	-	km	140,000.00	-	-
3.00	DRAINAGE									
3.02	Mitre drains	2,000.66	m	115.00	230,075.90	-	m	115.00	-	(230,075.90)
3.03	Inlet and outlet drains	300.00	Cu m	680.00	204,000.00	-	Cu m	680.00	-	(204,000.00)
3.13	Culvert cleaning	60.00	line	2,300.00	138,000.00	-	line	2,300.00	-	(138,000.00)
3.14	Side drain desiltation & disposal	10,000.00	m	125.00	1,250,000.00	400.00	m	125.00	50,000.00	(1,200,000.00)
4.00	SUB-GRADES, SUB-BASE AND BASES									
4.01a	Compacted Gravel Road Wearing Coarse	200.00	Cu m	3,850.00	770,000.00	100.00	Cu m	3,850.00	385,000.00	(385,000.00)
5.00	SURFACING									
5.01a	Road Patching(40mm)	1,000.00	Sq m	4,550.00	4,550,000.00	2,800.00	Sq m	4,550.00	12,740,000.00	8,190,000.00
5.01b	Road patching(25mm) - asphalt only	3,000.00	m2	3,680.00	11,040,000.00	1,333.00	m2	3,680.00	4,905,440.00	(6,134,560.00)
5.02	Overlay( Thickness Of 50mm)	500.00	Sq m	3,680.00	1,840,000.00	5,950.00	Sq m	3,680.00	21,896,000.00	20,056,000.00
5.04a	10mm Slurry Seal	12,500.00	m2	780.00	9,750,000.00	-	m2	780.00	-	(9,750,000.00)
9.00	CONCRETE FOR STRUCTURES									
9.01	Concrete Class 20/20	5.00	Cu m	32,900.00	164,500.00	67.50	Cu m	32,900.00	2,220,750.00	2,056,250.00
9.02	Concrete Class 30/20	5.00	Cu m	36,900.00	184,500.00	-	Cu m	36,900.00	-	(184,500.00)
13.00	MISCELLANEOUS FOR STRUCTURES									
13.05	Masonry Construction	3.36	Cum	15,900.00	53,424.00	-	Cu m	15,900.00	-	(53,424.00)
	Total for measured Works				33,527,499.90				43,520,190.00	9,992,690.10
	Contingency				5,029,124.99		ļ		-	(5,029,124.99)
	Add 16.5% Surtax				5,532,037.48				7,180,831.35	1,648,793.87 940.40
	Provision for Escalation TOTAL		1		0.13 44,088,662.50	1		1	940.53 50,701,961.88	6,613,299.38

# Works Contract Scope of Works

The scope of the Works Contract is patching, slurry sealing, and associated drainage works. During the execution of the contract, the consultant made significant changes to the contract by increasing the patching works due to damage caused by rain and reduced the value of such items as site clearance, drainage, gravel, and masonry.

# **Supervision Contract**

The RA advertised for supervision of the works using National Competitive Bidding, open tender and Least Cost Based Selection procedure. Only four firms submitted tenders and Mphizi Consulting Engineers were successful and were awarded the supervision contract at a contract price of MK81,254,690.00.

The duration of the contract was 12 months with a Defects Liability period of 12 months. To date, there have not been any significant changes to the supervision contract as it is tied to the works contract.

## Disclosures

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

## Site Visit

The consultants did not conduct a site visit on this contract.

# 3.0 CONCLUSIONS

The AT has noted that provision for escalation of inputs was inadequate. There were significant changes to the value of the contract with no corresponding extension of time.