



Construction  
Sector  
Transparency  
Initiative



**FINAL REPORT BY THE ASSURANCE TEAM  
ON  
THE MATERIAL PROJECT INFORMATION PROVIDED  
BY  
THE BUILDINGS DEPARTMENT, MINISTRY OF WORKS  
AND SUPPLY  
ON  
THE CONSTRUCTION OF SINGLE STOREY OFFICE BLOCK,  
TWO LOW COST AND ONE MEDIUM COST HOUSES AT  
CHONGWE**

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## List of Acronyms

AT	Assurance Team
ARE	Assistant Resident Engineer
BoQ's	Bill of Quantities
CoST	Construction Sector Transparency Initiative
ICB	International Competitive Bidding
GRZ	Government of the Republic of Zambia
MPI	Material Project Information
MSG	Multi Stakeholder Group
MWS	Ministry of Works and Supply
NCB	National Competitive Bidding
NCC	National Council for Construction
NRFA	National Road Fund Agency
PEs	Procuring Entities
QCBS	Quality and Cost Based Selection
ZMK	Zambian Kwacha
ZPPA	Zambia Public Procurement Authority

## **1. EXECUTIVE SUMMARY**

- 1.1. The Construction Sector Transparency Initiative (CoST) is a multi-stakeholder initiative aimed at increasing transparency and accountability in the construction sector through improved disclosure of material project information.
- 1.2. CoST is being piloted in seven countries; Ethiopia, Malawi, Philippines, Tanzania, United Kingdom, Vietnam and Zambia and is supported by the Department for International Development (DfID) of the United Kingdom.
- 1.3. In Zambia, four institutions involved in infrastructure development and maintenance; Ministry of Education, Ministry of Health, Buildings Department under the Ministry of Works and Supply and Road Development Agency, were selected for the pilot study.
- 1.4. The Construction of a one storey office block and houses in Chongwe was one of the projects selected under the Buildings Department of the Ministry of Works and Supply.
- 1.5. The office of the District Commissioner like most other Government Ministries and Departments faces an acute shortage of office accommodation. This necessitated the construction of offices and houses in Chongwe.
- 1.6. The design was undertaken by the Buildings Department at the Ministry of Works and Supply. The design is based on the Standard Method of Measurement Ver. 7 which is widely used in the construction sector.
- 1.7. The supervision of the works is also being undertaken by Buildings Department.
- 1.8. The appointment of the contractor, Datong Construction Limited followed an open bidding process in accordance with the provisions of the Public Procurement Act, 2008.
- 1.9. The fixed price contract signed by the Ministry of Works and Supply and the contractor is based on the standard Form of Contract as approved by the Zambia Institute of Architects and widely used in the industry. The contract in the amount

of K4,704,071,440.00 is for a period of 42 weeks from 30 June 2009 to 13 August 2010

1.10. There seems to have been a great hurry to start construction even when design was not finalised. This resulted in site and soil investigations and environmental impact assessment not being undertaken.

1.11. The information disclosed does not describe fully and accurately the appointment of Datong Construction Limited as contractor for the construction of the office block and houses.

1.12. The major issue of concern on the project is delayed payments.

## **2. INTRODUCTION**

### **2.1. Construction Sector Transparency Initiative**

- 2.1.1. The Construction Sector Transparency Initiative (CoST) is a multi-stakeholder initiative aimed at increasing transparency and accountability in the construction sector. CoST intends to ensure that national governments, affected stakeholders, and the wider public get what they pay for in public construction projects, by increasing transparency in the construction sector. It is expected that greater transparency, through greater disclosure of project information, will yield benefits to government, industry, civil society, and ordinary citizens.
- 2.1.2. It is, however, recognised that the disclosure of this information may not be sufficient on its own to achieve greater accountability. This is because some of the information is likely to be complex and not easily intelligible to the general public. For example, there are many reasons for time and cost overruns on construction projects that may be quite legitimate and not necessarily an indication of poor governance of the procurement process.
- 2.1.3. CoST is being piloted in seven countries; Ethiopia, Malawi, Philippines, Tanzania, United Kingdom, Vietnam and Zambia and is supported by the Department for International Development.
- 2.1.4. In Zambia, the National Council for Construction, on behalf of the Construction Sector Transparency Initiative (CoST) Zambia Multi Stakeholder Group (MSG) contracted an Assurance Team in May 2010, to undertake assurance services on selected public construction projects ranging from roads to health and school infrastructure to ensure that the information released is both accurate and in a form that can easily be understood by stakeholders.
- 2.1.5. A total of 17 projects have been selected for the pilot and the Construction of one single storey office block, two low cost and one medium cost houses in Chongwe is one of them.
- 2.1.6. The Assurance Team comprises four specialists in construction working together to obtain, verify and assess material project information and provide reports. This report has been prepared by the Assurance Team in accordance with its Terms of Reference and gives the activities undertaken and its opinion on the material project information (MPI) released by the Buildings Department in the Ministry of Works and Supply

on the Construction of one single storey office block, two low cost and one medium cost houses in Chongwe.

## **2.2. Objectives of the study**

2.2.1. The Zambian pilot has four objectives:

- to learn lessons to help in the development of CoST
- to learn lessons on improving transparency through the disclosure of project information
- to gain an improved understanding of construction project costs amongst public sector clients
- to learn and share lessons on the management and control of publicly-funded construction projects.

2.2.2. The Assurance Team has been contracted to carry out the following tasks on the project:

- Collect the material project information;
- Verify the accuracy of the material project information;
- Report on the extent and accuracy of the information which has been released;
- Analyse the material project information and make informed judgements about the cost and quality of the project;
- Report on the findings regarding the cost and quality of the project and highlight any outstanding issues of concern.

## **2.3. Project Description and Location**

2.3.1. The project involves the construction of one single storey office block, two low cost and one medium cost Houses and associated external works for the office of the District Commissioner.

2.3.2. Chongwe District is approximately 50 kilometers east of Lusaka on the Great East Road.



## **2.4. Approach to Pilot Study**

2.4.1. The approach taken by the Team generally involved:

- (i) Hold an initial meeting with the procuring entity to introduce the objectives of the study and submit the list of information (MPI) the entity was expected to disclose;
- (ii) Agree and identify the contact person on behalf of the procuring entity to provide the MPI and the timeframe for providing the information;
- (iii) Receive and analyse the initial information disclosed;
- (iv) Seek clarifications and further information where this was deemed necessary; and
- (v) Undertake a site visit to get an appreciation of the project and obtain clarifications, confirmations etc from the contractor and/or supervisor on issues not clear to the Team.

2.4.2. The findings were then compiled into this report.

### **3. ACTIVITIES UNDERTAKEN ON THE PROJECT**

#### **3.1. Meetings with Stakeholders**

- 3.1.1. The Assurance Team had a meeting with representatives of the Buildings Department lead by the Chief Architect at which the Assurance Team explained the objective of the study and the information that needed to be disclosed on the four projects that had been selected.
- 3.1.2. It was agreed during the meeting that the Department would provide the Team with material project information and documentation in whatever form available. A template of the material project information which needed to be disclosed was given to the Department.
- 3.1.3. It was further agreed during the meeting that the Architect in charge of the supervision of a particular project would be the contact person for any information and documentation required.
- 3.1.4. Follow-up meetings on the construction of one single storey office block, two low cost and one medium cost houses in Chongwe were held with the Project Supervisor and Procurement Unit in order to obtain a better understanding of the procedures followed by the Department in the development and execution of projects.

#### **3.2. Collection and Analysis of Data**

- 3.2.1. The material project information disclosed is given at Appendix I. The documents which were disclosed to the Assurance Team are listed in Appendix II.
- 3.2.2. The Team analysed the data as and when provided by the Ministry.
- 3.2.3. Obtaining the necessary documents proved to be more difficult than initially envisaged. This was largely due to the fact that the documents were lying in various places and offices, between the Procurement Unit, the Quantity Surveyors and the Architects.

#### **3.3. Site Visit**

- 3.3.1. After the initial information had been released, the Team undertook a site visit in order to have an appreciation of the Project and also discuss issues which were not clear in the documents and/or information disclosed.

3.3.2. The Team also used the site visit to collect additional/missing information and carryout a qualitative visual inspection of the works.

## **4. DATA VERIFICATION**

### **4.1. Project Identification and Budgeting**

4.1.1. The Ministry of Works and Supply is responsible for infrastructure development, supplies, Government transport in Zambia. Other activities falling within the ambit of the Ministry are the Road Development Agency, The National Road Fund Agency, the Hostels Board which operates a number of lodges around the Country and the Government Printing Department.

4.1.2. The Buildings Department is the Buildings Authority and is mandated to build and maintain government buildings including those of parastatal and statutory bodies. In the development of these construction and maintenance projects, the Department uses both internal and external resources for the design and supervision of the projects.

4.1.3. Since the establishment of the office of the District Commissioner, there have been no dedicated office accommodation and thus the Commissioners had to find make do with whatever accommodation was available. In many Districts therefore the District Commissioners were not adequately accommodated. To this effect Government decided to construct offices and houses for the office of District Commissioner throughout the Country.

4.1.4. The Project therefore is meant to address the identified need for office and residential accommodation for the office of the District Commissioner in Chongwe District.

4.1.5. The Team was not able to establish the budget for the project.

## **4.2. Procurement Procedures**

### **4.2.1. General Procurement Guidelines**

- 4.2.1.1. Procurement in the Ministry of Works and Supply are governed by the Public Procurement Act, 2008. In accordance with this Act, the Ministry of Works and Supply is supposed to prepare its Annual Procurement Plan based on the approved Annual Work Plan.
- 4.2.1.2. The approved Annual Procurement Plan shows the procurement method and budget for all projects to be undertaken by the Ministry. In accordance with the Public Procurement Act, 2008, the procurement method is generally determined by the estimated value of the procurement.
- 4.2.1.3. The Ministry of Works and Supply has a procurement threshold of K30billion for goods and works and K10billion for consulting services. Procurements with an estimated cost up to the threshold are authorised by the Ministry Procurement Committee. Procurements with an estimated cost higher than the threshold are authorised by the Central Tender Committee.

### **4.2.2. Procurement of Consulting Services**

- 4.2.2.1. The Buildings Department has capacity to undertake the design and supervision of most of its projects as it has architects, structural engineers, quantity surveyors etc. The decision whether or not to undertake a project internally is largely determined by work schedules of the relevant specialists.
- 4.2.2.2. The design and supervision of the project was undertaken by the Buildings Department in the Ministry of Works and Supply.

### **4.2.3. Procurement of Works Contractor**

- 4.2.3.1. The engineer's estimate for the works was K4,000,000,000.00 and therefore that the procurement of the works contractor be undertaken by open bidding (National Competitive Bidding) in accordance with the Public Procurement Act, 2008.

## **4.3. Procurement Process**

### **4.3.1. Project Design and Supervision**

- 4.3.1.1. Project design was undertaken by the Buildings Department. The design is the same for all District Commissioners' offices to be built throughout the country.

### **4.3.2. Works Contract**

- 4.3.2.1. The tender for the Construction of construction of one single storey office block, two low cost and one medium cost houses in Chongwe was invited in August 2010 and closed and opened on 26 September 2010.
- 4.3.2.2. At tender closing, Datong Construction Limited was the only bidder. The offer from Datong Construction Limited was evaluated in accordance with the solicitation document and determined to be responsive and awarded the contract at the contract price of K4,704,071,440.00.
- 4.3.2.3. The documents disclosed describe fully and accurately the appointment of Datong Construction Limited as contractor for the construction of one single storey office block, two low cost and one medium cost houses in Chongwe

## **4.4. Project Execution**

### **4.4.1. Design and Supervision**

- 4.4.1.1. The supervision of the works is being undertaken by the Buildings Department. The Department has a lot of experience in the supervision of works.
- 4.4.1.2. Monthly site meetings are held to monitor project progress and resolve technical and administrative issues affecting the implementation of the Project. The Supervisor in addition produces a quarterly progress report which is circulated to the various stakeholders.

### **4.4.2. Works**

- 4.4.2.1. The contract was signed on 2009 and the commencement date was 30 June 2009 with a duration of 42 weeks.
- 4.4.2.2. The fixed price contract signed between the Ministry of Works and Supply and Datong Construction Limited is based on the standard Form of Tender which is commonly used in the construction industry and approved by the Zambia Institute of Architects.

## **5. DATA ANALYSIS**

### **5.1. Project Design and Supervision**

- 5.1.1. As stated earlier, the design of the office block was undertaken by Buildings Department.
- 5.1.2. The Buildings Department has in place procedures to ensure that project costs, quality and time frame are kept within contract terms and conditions. To this effect monthly site meetings are held to monitor progress.
- 5.1.3. The design was undertaken without carrying out site surveys, soil investigations and environmental impact assessment. This has resulted in a number of variation orders.
- 5.1.4. The original layout for the office block was north-south. However, due to the terrain at the site, the office block has been constructed lying east – west. This decision was taken in order to reduce on cutting and back filling.
- 5.1.5. The large number of variation orders indicates that construction commenced before a thorough investigation of the site was undertaken. These variations included;
- Floor tiling of office block
  - Burglar proofing of both the office block and houses
  - Fencing of the houses

### **5.2. Works Contract**

- 5.2.1. The contract signed with the contractor is based on the standard Form of Tender as approved by the Zambia Institute of Architects and in use for most if not all construction projects in Zambia.



- 5.2.2. We were not able to establish the budget and engineer's estimate for the works and therefore are not able state whether or not the contract price of K4,704,071,440.00 is representative of market prices.
- 5.2.3. The quality of work is generally of high standard. The major area of concern is inadequate funding as a result of which payment of certificates is usually delayed.
- 5.2.4. Site meetings are held on a monthly basis and are used to monitor progress and discuss issues pertaining to the execution of the Project..
- 5.2.5. As at 30 June 2010, K3,272,722,252.66 had been certified and paid.
- 5.2.6. Although there have been a number of variations, this did not affect the project completion time. The contractor was able to accommodate the variations within the contract completion period.
- 5.2.7. As at July 2010, the project had achieved practical completion.
- 5.2.8. On the basis of the information disclosed and the site visit, the quality of the works from visual inspection was satisfactory

### **5.3. Issues of Concern**

- 5.3.1. There seems to be a great hurry to start the project even before the design was finalised. This led to a number of design changes on site and the resultant variation orders.
- 5.3.2. Funding on the Project was inconsistent and in many instances delayed. This could be a source of increased project costs due to interest on delayed payments as provided for under the contract.

## APPENDIX I: MATERIAL PROJECT INFORMATION

### PROJECT NAME: CONSTRUCTION OF OFFICE BLOCK AND HOUSES

#### AT CHONGWE

<b>1</b>	<b><i>Project Identification</i></b>	
	Project Specification	Construction of one single storey office block, two low cost and one medium cost Houses
	Purpose	To provide office and residential accommodation to GRZ
	Location	Chongwe
	Intended Beneficiaries	Staff of the office of the District Commissioner
	Specification	N/A
	Feasibility Study	None
<b>2</b>	<b><i>Funding</i></b>	
	Financing Agreement	Ministry of Finance and National Planning
	Budget	Engineer's estimate
	Engineer's Estimate	K4,000,000,000.00
<b>3</b>	<b><i>Tender Process for the Contract for Project Design</i></b>	
	Tender procedure	In-house
	Number expressing interest	N/A
	Number shortlisted	N/A
	Number submitting tender	N/A
<b>4</b>	<b><i>Tender Process for the Contract for Project Supervision</i></b>	
	Tender procedure	In-house
	Number expressing interest	N/A
	Number shortlisted	N/A
	Number submitting tender	N/A
<b>5</b>	<b><i>Tender Process for the Main Contract of Works</i></b>	
	Tender procedure	Open Bidding (National Competitive Bidding)
	Number expressing interest	N/A
	Number shortlisted	N/A
	Number submitting tender	01
	List of tenderers	Datong Construction Limited
	Tender evaluation report	Available
<b>6</b>	<b><i>Details of the Contract Award: Project Design</i></b>	
	Name of main consultant	In-house (Buildings Department)

	Contract price	N/A
	Contract scope of work	N/A
	Contract programme	N/A
<b>7</b>	<b><i>Details of the Contract Award: Project Supervision</i></b>	
	Name of main consultant	In-house (Buildings Department)
	Contract price	N/A
	Contract scope of work	N/A
	Contract programme	N/A
<b>8</b>	<b><i>Details of Contract Award: Main Contract for Works</i></b>	
	Name of main contractor	Datong Construction Limited
	Contract price	ZMK4,704,071,440.00
	Contract scope of work	Construction of one single storey office block, two low cost and one medium cost Houses and associated external works
	Contract programme	42 weeks, 30 June 2009 to 13 August 2010
<b>9</b>	<b><i>Execution of the Contract: Project Supervision</i></b>	
	Significant Changes to Contract Price, Programme, Scope with Reasons	
<b>10</b>	<b><i>Execution of Contract: Main Contract for Works</i></b>	
	Individual changes to Contract which affect the price and reason for those changes	<ul style="list-style-type: none"> <li>• Tiling of office block</li> <li>• Burglar proofing of both the office block and houses</li> <li>• Fencing of housing units</li> </ul>
	Individual changes to the contract which affect the programme and reasons for those changes	None
	Details of any re-award of main contract	None
<b>11</b>	<b><i>Post Contract Completion Details: Main Contract for Works</i></b>	
	Actual Contract Price	On-going
	Total Payments made to date	K3,272,722,252.66

## APPENDIX II: SCHEDULE OF DOCUMENTS DISCLOSED

<b>S/N</b>	<b>Description</b>	<b>Date released</b>	<b>Comment(s)</b>
1.	2 <sup>nd</sup> Quarter 2010 Progress Report	July 2010	
2.	Contract Document	September 2010	
3.	Evaluation Report	September 2010	

### **APPENDIX III: SCHEDULE OF CONTRACT CHANGES**

1. Installation of burglar bars to both office block and houses.
2. Supply and install tiles to offices.

## APPENDIX IV: PHOTO GALLERY



Plate 1 Completed house in Chongwe



Plate 2 Completed office block in Chongwe

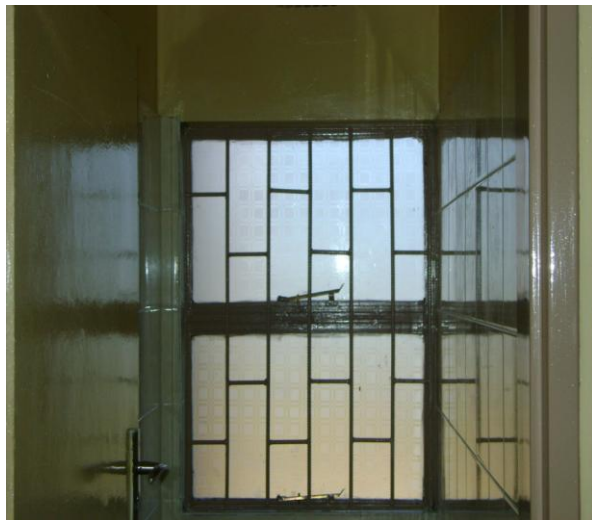


Plate 3 Burglar Proofing in Chongwe



Plate 4 Front of Office Block