IMPROVED MAINTENANCE SYSTEMS FOR DISTRICT ROADS IN TANZANIA
AFCAP/TAN/019

QUARTERLY PROGRESS REPORT NO. 5

1st October to 31st December 2011

February 2012

I T Transport Ltd., Ardington, United Kingdom
in association with Ambicon Engineering Ltd.
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# List of Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AFCAP</td>
<td>Africa Community Access Programme</td>
</tr>
<tr>
<td>CBO</td>
<td>Community Based Organisation</td>
</tr>
<tr>
<td>DE</td>
<td>District Engineer</td>
</tr>
<tr>
<td>DED</td>
<td>District Executive Director</td>
</tr>
<tr>
<td>DEO</td>
<td>District Engineers Office</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development (UK)</td>
</tr>
<tr>
<td>GBP</td>
<td>Great Britain pound</td>
</tr>
<tr>
<td>MC</td>
<td>Municipal Council</td>
</tr>
<tr>
<td>ME</td>
<td>Municipal Engineer</td>
</tr>
<tr>
<td>MEO</td>
<td>Municipal Engineers Office</td>
</tr>
<tr>
<td>Mio.</td>
<td>Million</td>
</tr>
<tr>
<td>PMMR</td>
<td>Performance Based Management and Maintenance of Roads</td>
</tr>
<tr>
<td>PMO-RALG</td>
<td>Prime Minister’s Office – Regional Administration and Local Government</td>
</tr>
<tr>
<td>ToR</td>
<td>Terms of Reference</td>
</tr>
<tr>
<td>TShs</td>
<td>Tanzanian shilling</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
</tr>
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</table>

## CURRENCY

**Approximate Currency Equivalents (as of December 2011)**

- 1 USD = 1,620 TShs
- 1 GBP = 2,400 TShs
Executive Summary

• This is the fifth progress report for the AFCAP Study into Improved Maintenance Systems for District Roads in Tanzania. It covers the period 1st October 2011 to 31st December 2011. Three districts are included in the Study – Bahi, Mpwapwa and Dodoma Municipal (see maps in Annex).

• Delays in procurement of contracts at district level continue to hamper progress of the Study. The progress in each district is described below.

• Bahi District: All works contracted out in financial year (f/y) 2010/11 under Area Based Framework Contracts were completed by early October 2011. Tenders for the three (3) packages of works to be carried out f/y 2011/12 were opened on 21st November 2011. Evaluation of tenders was completed in early December and the District Tender Board awarded the contracts on 30th December 2011. Contracts will be signed in early January 2012 with contract durations of 10 months. Preparation of 1st work orders will be completed in early January 2012 after an inspection of the roads by the DE staff.

• Mpwapwa District: The District Council met in mid November and decided to reduce the number of roads that were planned for maintenance during fy2011/12 from 42 to 19. This reduction had to be approved by PMORALG. All tender procedures were halted pending finalisation of the work programme. PMORALG approved the new list in mid December. Community contracts - one road out of the five earmarked has been dropped and the process for procurement of tools has started. The contracts with the three communities and one village government are now scheduled to be signed in mid January 2012. Framework contracts by quotations - only two packages of roads will be contracted to small-scale/labour based contractors using this method. Quotations are expected to be invited in January 2012.

• Dodoma Municipal Council: The Performance Based Maintenance contract was awarded in mid November 2011 and the contractor started working on the initial improvement works on some of the roads immediately after the award of contract. Work was stopped by rains in mid December. The rains are expected to continue to end of January 2012. The contract duration is 10 months.
1.0 INTRODUCTION

This report describes the progress of the AFCAP Study into Improved Maintenance Systems for District Roads in Tanzania (AFCAP/TAN/019) for the period from 1\textsuperscript{st} October 2011 to 31\textsuperscript{st} December 2011. This is the fifth progress report for the project.

The study is being carried out in three districts in Dodoma Region - Mpwapwa, Bahi and Dodoma Municipal where three different contracting systems are being tested. The systems are; i) Area based long-term framework contracts, ii) Performance based management and maintenance of roads contracts, and iii) Community contracts. Testing of the three models was planned to start in the three districts in 2010. However, there have been delays due to Councils taking time to fully understand the different systems as well as slow contract procurement procedures at district level.

This Progress Report No. 5 follows the fourth progress report that covered the period from 01\textsuperscript{st} July to 30\textsuperscript{th} September 2011 that was issued in October 2011.
2.0 PROGRESS IN BAHI DISTRICT

2.1 System to be Tested

The maintenance system being tested in Bahi district under the study is the ‘Area based framework contracts’. The roads earmarked for maintenance during f/y 2010/11 were grouped in three packages covering the northern, central and southern parts of the district. The same system of packaging will be used for maintenance of roads in f/y 2011/12. This will further test the system’s effectiveness with District Engineer’s staff having gained some familiarity and experience from the first year. The works in each package include spot improvements, routine maintenance and culverts/bridge works as deemed necessary by the DE.

2.3 Progress of works contracted in F/Y 2010/11

The f/y 2010/11 road maintenance works were all completed in early October 2011. The quality of works done by the three contractors was satisfactory. Although the phasing of works through the 10 months contract was not properly done due to untimely issuance of work orders, the concept has been appreciated and found to be a good approach. The Council has decided to use the same approach for f/y 2011/12 maintenance works and expect to do better after gaining experience from the past contracts.

2.4 Framework Contracts to be implemented in F/Y 2011/12

The Council prepared the tender documents and invited bids for the three packages of roads to be maintained in f/y 2011/12. The bids were opened on 21st November 2011 and evaluation of the same completed on 5th December 2011. The Council Tender Board met and awarded the three contracts to the successful contractors on 30th December 2011. The signing of the contracts is to take place during the 1st week of January and 1st work orders are to be issued immediately thereafter.

A map of Bahi district showing the locations of the three packages is appended as Annex 1.

2.5 Planned Activities January – March 2012

The planned activities for the next three months – January to March 2012 are:-

- Signing of contracts and issuance of 1st work orders for three contracts in early January 2012;

- Undertaking road condition surveys using GPS in January 2012 on all the roads under the three f/y 2011/12 packages as a baseline to assess the change of condition as a result of maintenance to be carried out.

- DE staff to supervise the road maintenance works planned to start in January 2012.
3.0 PROGRESS IN MPWAPWA DISTRICT

3.1 Systems to be Tested

The maintenance systems to be tested in Mpwapwa district are:

1. The ‘small contracts for extended periods (framework contracts)’ on most of the important district roads and;
2. ‘Community contracts’ on selected feeder roads.

With the first approach, it is intended to have several medium to small contracts to be procured through quotations and competitive bidding involving the registered contractors of classes 6 and 7 including the trained labour-based contractors. The ‘work scheduling’ approach is to be used and the contracts are to be for periods of six months. The works will include spot improvements, routine maintenance and culverts/bridge works where deemed necessary.

With community contracts, the two models i.e. one of using villagers under village governments and the second of using Community Based Organisations (CBOs) will be tested on four selected roads serving productive areas with difficult access where many farmers and livestock keepers are living. The works will be mostly routine maintenance and some spot improvement works.

3.2 Progress

The has been delays experienced in commencement of the projects in the district after the Council decided to change the district work plan for the f/y 2011/12 which was earlier approved by PMO-RALG. The new work plan has reduced the number of roads to be maintained from 42 to 19. The new work plan was approved by PMO-RALG in mid December 2011.

3.2.1 Framework contracts

Following the change in work plan, the Council will now test the ‘framework contracts’ system on two packages of roads. The low value of the contracts (below Shs.100 million) allows for use of ‘quotations’ in soliciting bids and reduces the time for procurement of contractors. The two packages are shown in the table below.

<table>
<thead>
<tr>
<th>s/n</th>
<th>Road name</th>
<th>Length (km)</th>
<th>Type of maintenance</th>
<th>Estimated cost (TShs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Package No. 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Chiseyu – Berege</td>
<td>6</td>
<td>PM</td>
<td>30.0</td>
</tr>
<tr>
<td>2</td>
<td>Berege - Msagali</td>
<td>12</td>
<td>RM</td>
<td>12.0</td>
</tr>
<tr>
<td>3</td>
<td>Idilo – Chamhawi</td>
<td>2</td>
<td>SI + 1 No. 900mm culv</td>
<td>10.2</td>
</tr>
<tr>
<td>4</td>
<td>Mima - Mkanana</td>
<td>20</td>
<td>SI &amp;RM</td>
<td>46.2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>67</td>
<td></td>
<td>98.4</td>
</tr>
<tr>
<td>Package No. 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Kibakwe – Wotta</td>
<td>21</td>
<td>SI &amp; RM</td>
<td>31.0</td>
</tr>
</tbody>
</table>
Quotations are to be solicited in January 2012 and contracts awarded in same month with contract durations of six (6) months.

### 3.2.2 Community Contracts

Following the change in work plan the Council will now test the ‘Community Contracts’ system on four roads instead of the five earlier identified. Three roads that will be contracted to CBOs and one that will be contracted to a village government are listed in the table below.

<table>
<thead>
<tr>
<th>s/n</th>
<th>Road name</th>
<th>Length</th>
<th>Contract amount (Shs)</th>
<th>CBO/ Village Government</th>
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<tr>
<td>1</td>
<td>Makutupa - Bumira</td>
<td>4.3</td>
<td>2,100,000</td>
<td>CBO</td>
</tr>
<tr>
<td>2</td>
<td>Pwaga - Kitati</td>
<td>10</td>
<td>4,700,000</td>
<td>CBO</td>
</tr>
<tr>
<td>3</td>
<td>Lumuma - Kizi</td>
<td>12</td>
<td>10,500,000</td>
<td>Village Govt</td>
</tr>
<tr>
<td>4</td>
<td>Kizi - Mbuga</td>
<td>12</td>
<td>10,500,000</td>
<td>CBO</td>
</tr>
</tbody>
</table>

The process of procuring working tools to be provided to the CBOs started in December 2011. Signing of contracts and training of communities is now planned for January/February 2012 and the duration of contracts will be 8 months.

A map of Mpwapwa district showing the locations of the two packages and the four roads for community contracting is appended as **Annex 2**

### 3.3 Planned activities January – March 2012

The planned activities for the next three months – January to March 2012 are:-

- Solicit quotations for the four framework contracts in January 2012 and engage contractors in same month;
- Finalise procurement of working tools for community contracts in January 2012;
- Conclude and sign contracts with CBOs and the village government and train the community on road maintenance basics in January/February 2012;
- Supervise the road maintenance works planned to start in February 2012.
4 PROGRESS IN DODOMA MUNICIPALITY

4.1 System to be Tested

The maintenance system to be tested in Dodoma Municipality is the ‘Performance Based Management and Maintenance of Roads (PMMR)’ contracts. The network to be covered will include a number of roads outside urban area (district and feeder roads) with a total length of about 60km. The works on some of the roads will include spot improvements and attending to ‘trouble spots’ followed by routine maintenance of the network for a defined period.

4.2 Progress

The evaluation of the bids was completed in early November 2011 and the contract was signed with the successful bidder on 22nd November 2011. The contract duration is 10 months. The contractor commenced works on 29th November 2011 and has been working on Mbambala Jctn – Chizomoche and Bihawana – Chididimo roads. The works being done are those of spot improvements and drainage works.

On going works on Mbambala Jctn – Chizomoche and Bihawana – Chididimo roads

A map of Dodoma Municipal Council showing the locations of the roads under PMMR contract is appended as Annex 3
4.3 Planned activities January – March 2012

The planned activities for the next three months – January to March 2012 are:-

- Supervise the initial improvement works to be done on some of the roads (planned to be completed by end of March) and follow up routine maintenance of the remainder of roads;

- Conduct end of month inspections and prepare monthly payment certificates;

- Continue to sensitise the Council management team and councillors on the PMMR concept.
5 MONITORING EFFECTIVENESS

It is planned to carry out road condition surveys using GPS within the coming months to capture the condition of the roads after maintenance and make a comparison with conditions seen before maintenance.

The effect of the improved roads on social-economic activities in the areas that the roads are located will be assessed later as these take a longer time to become noticeable. This will be carried out towards the end of the study.
6 ISSUES AND CHALLENGES

Issues and challenges during this reporting period are as follows:-

**Bahi District:** The delay in awarding of the contracts has resulted in failing to carry out the maintenance works that were planned to be done before the rains. The shortage of staff including lack of a qualified District Engineer is still a major issue. Due to low budgets, the Councils are reluctant to engage consultants to assist. With works expected to commence soon, it will be difficult for the few staff available in the DEO to effectively supervise works and prepare the work orders on time.

**Mpwapwa District:** The changes that have been done to the District’s roads maintenance plan have reduced the number of roads that had been earlier planned for the study. Shortage of staff including lack of a qualified District Engineer is still a challenge and will greatly affect the Study in terms of supervising the works when they start and timely preparation of work orders for the framework contracts.

**Dodoma Municipality:** Now that the works have started it is important that the contract is managed well. The DEO staff will have to follow up very closely the contractor’s performance especially on the routine maintenance works and prepare the monthly certificates timely.

It has not yet been possible to organise a PMMR sensitisation forum for the Council management team. The Municipal Engineer has fixed a date of 15th February for this in one of the routine councillor’s meetings.

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Annexes - District Maps
Annex 1 - Bahi District Map
Roads for community contracts are numbered 1 to 4
Two frameworks contracts are for roads in Package Nos 1 and 2
Annex 3 - Dodoma Municipal Map