**FINANCIAL AND BUSINESS MANAGEMENT TRAINING FOR ROAD CONTRACTORS**

**MODULE SIX SESSION SIX: PRICING ROAD WORKS**

**Objectives:**

This session is a continuation of the previous that considered the estimation of costs of works, selection of margins and determination of work rates for segments and tasks that are to be performed. This session now focuses on the application of the predetermined rates to bills of quantities to arrive at a bid price.

By the end of this session trainees will be familiar with and able to:

1. Interpret the bills of quantities for appropriate pricing
2. Practice pricing of bidding documents
3. Use scenarios to determine cost, revenue and profitability of a contract.

The works are best done using Microsoft Excel worksheets. With it is possible to play around the bidding document while making different scenarios particularly about margins or different cost considerations.

**Approach to pricing road works:**

Pricing road works involves use of predetermined rates/prices and applying them to bills of quantities as provided by the employer. It involves the careful reading and understanding the requirements of the employer as specified in the BOQs. The applicable rates are usually predetermined. However it is important to review the rates to suit the changing market environment and factors seen during site visits. Rates may be built up over a period of time but some basic data could be obtained from MOWT or FEDIC that could assist in the setting up of own rates.

For example, The markup should be reviewed considering anticipated competition and bid evaluation methodology.

**Improving the pricing of bids:**

In order to ensure that you remain competitive in the bid process, understand the BoQs and select appropriate rates to them. They are for example different rates used for excavation of soils; when they are soft, hard or rocky. Once the appropriate rates are selected, check the multiplications and the additions carefully to ensure the bid is free of arithmetic errors. Although arithmetic errors are usually adjusted for during the bid evaluation, it does not create good impression when there are major computational errors in a bid. You may not yourself be able to get the correct feel about a bid price before submission that is erroneous. Apply appropriate tax rates where applicable (usually VAT but in most cases of road works it is exempted). Examine the final bid price for reasonableness, competitiveness and profitability. This is only achieved through experience and of course only meaningful when using appropriate costs. Pricing of bids should not be done hurriedly. Time should be allowed to scrutinise the figures to ensure that they are correct, reasonable and competitive. A good contractor should at the time of bidding have a fair assessment of the profitability of the bid and its acceptability. This is important because the bidder is bound by the bid bond to honour their bids. It would be punitive to walk out of the bid if it is later found to be unprofitable! Such action may also expose the bidder to disrepute. Set up the BOQ on Excel worksheet with costs, margins and price carried to a summary worksheet.

Therefore apply different costs scenarios where there are opportunities for cost cutting to see the effect on revenues (bid price) and profit. Try to apply different margins to cost and evaluate the impact on revenue and profit. Then relate the anticipated outcome to return on capital invested in order to ensure that if the bid is successful it will bring in satisfactory returns to the business.

**The pricing of BOQs:**

For the exercise, you will use BOQ for simple road works at Kanushu-Magege Road (Km 04+000). Consideration was given to a stone pitched side drainage line and the following materials.

Gravel was considered simply to fill in on the areas where the excavation was done deeper than the depth required. Cement, sand and water are used to form mortar that will be used to consolidate the stones. Where access roads from the main carriageway side culverts are installed and reinforced with wire mesh, iron bars and concrete.

Machinery like trucks is needed to ferry materials, loader used to load these trucks the material that is extracted from the drainage line and the grader needed to grade the shoulders and a tractor for sweeping the site to remove dust. Though in most cases especially in the local governments some of the machines may not be hired from far. This is because the government allowed the LG’s to hire out their machinery to contractors working in the same area.

Fuel for the machinery has to be put into consideration inclusive the cost of the operator. Also importantly is to include some miscellaneous to cater for its breakdown in case it happens so that work doesn’t stall, which might increase costs.

Personnel have to also be catered for as they are the ones who perform the job. They include; Site Engineer, Foreman, Technicians, Masons, Machine Operators and Drivers. This helps you to ascertain the amount of money you going to spend on them.

There are other indirect costs that have to also be included; (De) mobilisation for the machinery and other site items, district levy for the district on the works, insurance & bonds ie performance bonds and bid bonds/ guarantees, bill boards and signage’s that show the road users that works are going on, who is the contractor, supervisor, funder and what chainages are being worked on, maintenance of whole works ie machinery breakdowns, increased man hours due to unforeseen changes.

The winning strategies:

* Maximize technical scores

Study the evaluation criteria carefully when bidding to ensure that you maximize your technical scores. Items like previous works should be given with details of the assignment, the value, the personnel involved and any certificates of completion. Give details of personnel, their qualifications and experience. List the equipment and their particulars and evidence of ownership including details of models to be convincing.

* Seek for low cost competitive advantages

When costing or executing works seek for alternatives that are low cost. For example use of casual unskilled labour as much as possible, hiring instead of purchase of rarely used equipment, timely scheduling of works and competitive procurement of materials and services. Maintain a lean administrative structure to reduce indirect costs.

* Select moderate markup policy

Every business is free to determine its markup policy. The markup should be large enough to ensure reasonable return on the funds invested while remaining competitive. The return on funds invested should be considered only for the period the funds remain unpaid.

* Target volume (turnover)

In order to improve return on funds invested, try to have many jobs during the year so that the funds are rolled over from one contract to another. This also helps to avoid keeping equipment and other resources idle.