

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

CPA (U) EXAMINATIONS

LEVEL FIVE

INTEGRATION OF KNOWLEDGE - PAPER 19

COMPREHENSIVE CASE STUDY

AFTERNOON SESSION MATERIAL

MONDAY, 15 DECEMBER 2003

INSTRUCTIONS TO CANDIDATES

1. Time allowed : 3 hours 30 minutes
12.00 – 3.30 pm (3 hours 30 minutes) Writing
2. The following pages contain compulsory case study questions.
3. The appendices are also attached
4. The completed answer to the case study must be handed in at the end of the examination
5. All answers to the case study and any working papers, clearly labeled as such, must be handed in at the end of the afternoon session.
Where working papers and notes form part of your answer, ensure they are appropriately cross-referenced.
6. It is in your interest to hand in **ALL** written work you prepared during the examination.
7. Please read further instructions on the answer book.

One morning, soon after joining MBS, Charles received a call from MS Jr., asking him to attend the board meeting to discuss an issue of great importance. Arriving at the meeting, Charles was briefed on the item under discussion.

Julius was concerned that the company was increasingly falling behind the competition because it did not have the resources to produce all its components to the levels of quality and price that were expected by customers.

Julius suggested that MBS should start to look at ways of **outsourcing parts of its production processes** to companies that could produce more cheaply and to comparable levels of quality. His recent sales trip to Tanzania had thrown up the possibility of buying the *Internal Control Unit (ICU)*, a core component in one of the company's main products, **for only TZ Shs 80 million** from BUKOBA ELECTRICS LTD (BEL), a Multinational company based in Tanzania. **This cost per unit will increase in line with the inflation in Tanzania.** The offer from "BEL" would constrain price rises to the national inflation rate over five years, to be renegotiated after that. Such a strategy would allow MBS to cut back on manufacturing and focus on assembly and selling, increasingly seen as the main sources of competitive advantage and profitability for the firm. Other benefits would include the opportunity to sell off equipment and have access to knowledge of Internet trading already being pioneered by "BEL". It would also allow MBS to reduce staff numbers by 30. This would involve the firm in paying out Shs 1,200,000,000 in redundancy payments to those staff. The redundancy costs are tax-deductible by the firm.

Julius' investigation into "BEL" had revealed some additional information. The Tanzanian Government is keen to encourage foreign investment and generate exports to provide important foreign exchange earnings and employment in the country.

Ahmed was firmly against the idea of using manufacturing locations outside the country, since it represented a major departure from the historical activities of the business. He was also concerned about what customers might think if they found out that MBS was compromising on quality by "buying-in" imports.

Required:

MS Jr. could see both sides of the arguments presented by Julius and Ahmed and was uncertain on how to go about evaluating such a fundamental issue.

He has asked you, Charles Kasule, to put together a report covering the following major factors that need to be considered in relation to this strategic problem, culminating in a recommendation to the Board.

- Introduction

(5 marks)

- Financial evaluation of the decision whether or not to outsource taking into account a Weighted Average Cost of Capital of MBS of 35%, the projected spot exchange rates, the savings made as a result of outsourcing, redundancy costs, sale of machinery and tax consequences of the savings, redundancy costs and sale of machinery.

- Financial status analysis of MBS bringing out the impact of movements in foreign exchange on the company's operations

-Your best considered view on the appropriate Internal control systems over purchases at MBS and the position of the Internal audit department.

(45 marks)

- Financial status analysis of BEL, the quality and reliability of supply of the "BEL" ICU component.

(20 marks)

-The impact of the decision on all stakeholders of MBS.

(25 marks)

- Conclusions / recommendations

(5 marks)

(Total 100 marks)

Returning to your desk you start to think about the information you will need to gather to help with the report. First, you need to find out more about "BEL" - a good start will be to see what information is available on its website. Half an hour later you have printed off extracts from its recent financial reports and made notes from the material that you found there (**Appendix 4**).

Realizing that any calculations on the project appraisal were going to have to take account of various macroeconomic differences between the two countries, you searched for relevant data in your bank's website that might be useful (**Appendix 5**). An extract that you came across in a newspaper is also included.

From an internal perspective you were interested in detailed analysis of the Internal control system as well as detailed cost and quality information relating to the manufacture of the internal control unit. You set up meetings with David Obong in Research, Sara Wava in Operations and Bosco Jingo the Chief Internal Auditor. The notes you took from these meetings are shown in **Appendix 6**.

It is now time to prepare your report.

APPENDIX 4

Notes from the “BEL” Website

- BEL was founded 40 years ago
- BEL is owned by a number of local Banks in Tanzania and Investment companies.
- BEL has 3,354 staff - down from 4,168 last year.

	2002		2001	
Return on Capital Employed	<u>336</u> 2,550	13%	<u>278</u> 2,325	12%
Profit to turn over	<u>336</u> 2,263	15%	<u>278</u> 2,090	13%
Asset turnover	<u>2,263</u> 2,550	0.89	<u>2,090</u> 2,325	0.9
Gearing	<u>862</u> 1,583	54%	<u>800</u> 1,441	56%
Curent Ratio	<u>753</u> 590	1.28	<u>679</u> 451	1.51
Quick Ratio	<u>753 - 457</u> 590	0.50	<u>679 - 314</u> 451	0.81
Interest Cover	<u>336 + 15</u> 81	4.33	<u>278 + 21</u> 68	4.40
Dividend cover	<u>192</u> 50	3.84	<u>166</u> 30	5.53

Breakdown of turnover

	2002 TZ Shs '000	2001 TZ Shs '000
Electronic Components	1,561	1,573
Toys and Calculators	445	435
Electronic equipment	257	82
Total	<u>2,263</u>	<u>2,090</u>

Product Information

All the major products of “BEL” are featured on the website along with:

- Detailed product specifications;
- Installation instructions;
- Pages of frequently asked questions about each product;
- E-mail links to product specialists in BEL ; and
- E-mail and telephone links to the sales department at BEL.

The information appears to be comprehensive and innovative. There is no indication of the amount sales generated from the web site.

Appendix 5

Miscellaneous information

You have noted the following information from your bank's website

- The current and projected spot exchange rate between the TZ Shilling and the Uganda Shilling are shown in the table below:

	Spot Rate
Current : TZ shs / Ug. shs	5.9000
Year 1	6.4619
Year 2	7.3318
Year 3	8.6131
Year 4	10.3691
Year 5	12.78522

- The borrowing and lending rates in each country are:

	<i>Lending</i>	<i>Borrowing</i>
Uganda	7%	9%
Tanzania	14%	16%

Press report

The following is an extract from a report by the Business correspondent in the East African News Paper, dated 20 November 2002:

'Tanzania has been much in the news recently. The current government has come under increasing pressure to control spending and curb inflation. The unemployment figures are rising on an annual basis and it is predicted that total unemployment will be 18 percent by the end of 2003. There is increasing unrest and the country's military leaders are expressing grave concerns about the democratic government's ability to run the economy. **Inflation in Tanzania is currently 12 per cent and is expected to rise by at least 3 percentage points each year over the foreseeable future.** For the next five years inflation is projected as per table below:

	Inflation %
Current	12
Year 1	15
Year 2	18
Year 3	21
Year 4	24
Year 5	27

The government is anxious to help the business community and is keen to drive up exports.

Appendix 6

Information obtained from MBS staff

The following miscellaneous information was gathered from your internal conversations with MBS staff:

- Machinery that is currently used to manufacture the internal control unit (ICU) has a remaining useful life of five years. The machinery has a current book value of U.shs 400,000,000 but, because of the specialized nature of the equipment, the realizable value is only U.shs 100,000,000. The machinery originally qualified for a special 100 per cent first-year allowance for taxation purposes.
- The 30 employees that would have to be made redundant are currently paid in the range of U.shs 18,000,000 to U.shs 20,000,000 each and wages are expected to increase in line with the general Ugandan rate of inflation. MS Jr. will pay each employee two years' current salary as a redundancy payment.
- Fifteen per cent of raw materials stocks are used in the manufacture of the ICU. These raw materials can be used elsewhere in the production process and would be used up in six month's time. Included in work-in-progress and finished goods stocks are the equivalent of 25,000 ICUs. Demand for ICUs over the next five years is forecast at 86,770 (Yr₁); 77,670 (Yr₂); 69,220 (Yr₃); 61,310 (Yr₄) 52,850 (Yr₅).
- Results of quality tests performed on 100 "MBS" ICUs and an identical number of the "BEL" component are shown in the table below.

<i>Description of test</i>	Successful tests of 100	
	<i>MBS controller</i>	<i>BEL component</i>
Strength (resistance to damage)	99	98
Capability to deal with extreme conditions (hot and cold)	99	98
Capability to deal with extreme voltage fluctuations	99	99
Reliability (absence of failure in use)	100	100

The tests were the same as those that we originally conducted before we first used the ICU in production. The preliminary statistical analysis of

the results shows that the differences are not statistically significant. The reliability test was conducted over only six days, which is a very short time.

Comments from R&D tester:

'First, the raw materials and the finishing of the BEL component are clearly inferior to the ICU. Second, the ICU was specifically designed by us and, consequently, the interface between the BEL component and the other components in our products may not be as good. I am not sure what the effect of this might be. Third, as you know, we have started developments on significantly upgrading many of our components, including the ICU. Is this work to be wasted?'

Detailed Internal Control Unit costing

	Qty weight / length	Code/description	Cost per unit/rate	Cost	Total Cost
			UShs	UShs	UShs
Raw materials and bought-in components*	3x	M007	0.14	0.42	
	3x	M009	0.17	0.51	
	3x	M011	0.11	0.33	
	1.2	46/45	1.20	1.44	
	4.2	12.90	0.70	2.94	
	9.1	2/45	0.10	0.91	
	2x	Insulating attachments	1.80	<u>3.60</u>	
					10.15
Direct labour costs		Production, 0.14 hr	10.50	1.47	
		Assembly, 0.2 hr	12.50	2.50	
		Quality control/inspection, 0.1 hr	13.50	<u>1.35</u>	
Minor cost items					5.32
Indirect expenses		60% of direct labour costs			0.45
					<u>3.19</u>
Total cost (to summary of detailed costings)					<u>19.11</u>

* Several of the sub components are currently bought-in

The unit cost of UShs 19.11 is likely to increase in line with the inflationary situation in Uganda over the next five years.

- Internal Audit and Internal Control Systems

The morale of Chief Internal Auditor and staff of the department was observed to be low. Discussions with staff of this department revealed that they were unhappy with the placing of the department in the whole organization structure and the inaction by the Board of directors on there recommendations. They were not even sure whether the Board ever gets to discuss the Internal audit report. Of particular concern was the improper system of procurements and storage of raw materials.

Present Value of US\$ 1 at 100r% compound interest: $(1+r)^{-n}$,

Year	5%	25%	35%
1	0.9524	0.8333	0.7407
2	0.9070	0.6944	0.5487
3	0.8638	0.5787	0.4064
4	0.8227	0.4823	0.3011
5	0.7835	0.4019	0.2230
6	0.7462	0.3349	0.1652