

Title:

Regulatory Impact Assessment (RIA) on Charge – Out-Rates (COR) for Engineering Services

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1 INTRODUCTION

The Engineering Institution of Zambia (EIZ) is responsible for the regulation and promotion of the engineering profession through registration of engineering organisations, units and professionals. The EIZ Act No 17 of 2010 also creates the Engineering Registration Board (EngRB) with a mandate to perform all the registration functions of the institution.

The EIZ regulates the practice of engineering in all fields, including agriculture, consultancy, information and communication technology, manufacturing, mining and metallurgy, power and energy, transport, water and sanitation among others.

The institution was founded in 1955, and has since then undergone a number of legislative changes through the 1972, 1992 and 2010 Acts of parliament respectively.

The 2010 Act extended regulation mandate to all classes of the engineering profession (i.e. Engineers, Technologists, Technicians and Craftsperson's).

Engineering is the bedrock for the development of the Zambian economy. Every section of economic activity has the roles of engineering and technology. Whether it is raw material, manufacturing or distribution. The engineering profession cuts across various sectors of the among them but not limited to the following; Agriculture, Energy, Mining, Communication, ICT, Water and Sanitation, Waste Management, Education, etc.

EIZ plays a much stronger role in the public policy process to provide the right incentives for industry and others to move on a sustainable path so that engineering professionals can be encouraged and supported to design sustainable technology for the purpose of economic development that benefits society in a holistic way now, and in future.

2 BACKGROUND

The provision of engineering goods and services is not classified according to; time, expert level, and output. Engineering services in SADC countries are key infrastructural services and a tool for upgrading welfare. The sector collectively contributes between 3 - 13% of GDP and about 5% of employment across SADC economies. More than half of the engineering related activities in the region are under government procurement in infrastructure development programs. Furthermore, many SADC countries are net importers of most engineering related services from other developing countries such as China and South Africa. This could be alluded to among other things the lack of a guidelines that would equitably level the pricing structures that would subsequently provide opportunities to indigenous firms and engineering professionals to participate in the sector.

The engineering services sector is a critical determinant of how successful an economy will be at converting its public and private resources or investment efforts into physical assets. For instance, emerging evidence from a large sample of countries suggests that restricted sectoral competition resulted in relatively higher engineering services costs (*Caesar Cheelo and Robert Liebenthal*,

2020) which were in turn correlated with relatively poorer-quality infrastructure installations. Similarly, the success of building social infrastructure such as schools, health facilities, water and sanitation systems, and so on critically depended on the competitiveness of engineering services. If engineering services faced bottle necks or constraints in production and are unable to increase supply, any surge in demand, other things being equal, would force costs and prices to rise, reducing the output of physical assets.

3 PROBLEM STATEMENT

The engineering sector is faced with uncertainty with regards to pricing of its services. Currently, there is no legal framework that guides the pricing of goods and services for engineering.

The lack of the above guidelines has exposed the sector to exploitation of both the service provider and the consumers. Consumers of engineering services are left to bargain without formal knowledge. The same is the case with service providers who would charge without formal baseline indicators.

There are noticeable challenges were huge amounts of public funds are lost due to lack of predictable pricing structures. For instance, the illicit capture of public tenders and their sale on illegal secondary tender markets might be a new phenomenon but evidence of strongly suspected corruption in the sector. The Auditor General's report for the year ended 2016 (OAG 2017) records over twenty major engineering services-related counts of financial irregularity and/or misconduct on the part of procuring entities (ministries, provinces, and spending agencies) and/or contractors. Infrastructure-related anomalies, irregularities, misconduct, and so on amounting to a total of ZMW213.3 million (equivalent to US\$22.5 million) were observed in the 2016 financial year.

The FIC (2018) report provides further evidence of possible corruption and malpractice in the engineering related services sector: During the year [2017], it was observed that some businesses in the engineering related services sector made large cash deposits. This was unusual considering that payment for services provided in this sector were made either by cheque or other safer electronic means. It was noted that a total of USD 9,668,421.14 and ZMW 14,150,918.70 cash deposits were made by engineering related businesses. In 2017, a total of USD 3,430,852.81 and ZMW 391,553,520.20 cash withdrawals were reported to the Centre.

The demand for engineering services will continue to exist as infrastructure development projects are rolled out. In turn, service providers and consumers of engineering services would continue to suffer higher and unpredictable costs which could impact planning and budgeting. A well-structured pricing mechanism is required in the sector to address the observed challenges of overpricing and underpricing, quality and exploitation.



Allison Lawless SADC Engineering numbers and needs 2015 – GDP per Engineering related economic activity (48% of GDP)

The information above gives an indication of the contribution to the national economy by engineering professionals.

While the summary below gives the current average status of hourly rates of engineering professionals per category.

SUMMA	RY INDUSTRY BASELINE S	URVEY OUT	COME								
S/N	QUALIFICATION/CLASSIFICATI ON	# OF CORRESPO NEDNATS	FEMALE	MALE	MONTHLY LOWEST SALARY RATE(ZMW)	MONTHLY HIGHEST SALARY RATE (ZMW)	AVERAGE LOWEST HOURLY RATE(ZMW)	Average Highest Hourly Rate (ZMW)	CONSUMER S RATES CHARGED (LOW)	CONSUMER RATES CHARGED (HIGH)	60% of the CONSUMER HIGH SET AS BASELINE to UPLIFT OR REDUCE & BENCHMARKED TO OTHER SIMILAR
1		405	61	244	3 000 00	15 000 00	17.05	95.02	22.20	161.02	COUNTRIES 07.16
1	CRAFT PERSONS (CT-C4)	405	01	344	3,000.00	15,000.00	17.05	05.23	32.39	101.93	97.10
2	TECHNICIANS (C1-C3)	105	11	94	3,000.00	15,000.00	17.05	85.23	32.39	161.93	97.16
	TECHNOLOGISTS+DIPLOMA										
3	(C1-C3)	96	6	90	3,000.00	40,000.00	17.05	227.27	32.39	431.82	259.09
4	DEGREE (C1-C6)	607	85	522	3,000.00	100,000.00	17.05	568.18	32.39	1,704.55	1,022.73
5	MASTERS(C1-C4)	23	3	20	6,000.00	>100,000	34.09	568.18	64.77	1,704.55	1,022.73
6	DOCTORATE (C1-C3)	1	0	1		40,000.00	-	227.27	-	681.82	Not sufficent Data
7	TOTAL	1237	166	1071	3,600.00	42,000.00	20.45	238.64	38.86	453.41	272.05
	The Statistics shows the actual Rates being paid to Engineering Professionals from Employing and hiring Units Matched with Market Average on consumers										

available professional

The adjustments shall be well actualised, if the Guidelines of competencies in each category is well utilised by hiring units and consumers in assigning costs to the Resource utilised with correct accreditation

SETTING THE GOALS / OBJECTIVES 5

Situation Analysis

For many years, the recommended charge out fees for professional services has not been actualized, hence the engineering professionals have had to sometimes faced challenges when negotiating contracts, either for employment or other professional engagements. Needless to say this usually ends in many professionals be disadvantaged economically. Further, it is a big challenge for the general public to obtain recourse when a contractor delivers substandard works.

6 GENERAL OBJECTIVE

To put in place three interventions on provision of engineering services in order to ensure equity in engineering services sector by December, 2025.

7 SPECIFIC OBJECTIVES

The specific objectives of these guidelines are to:

- (i) To provide a schedule of minimum charge out fees for engineering professionals in order to create an even pricing model and enhance budgeting and planning for massive infrastructure development by 2025.
- (ii) To provide a schedule of minimum charge out fees for engineering professionals in order to protect engineering service providers from exploitation by 2025.
- (iii) To ensure transparency in the pricing of engineering services in order to reduce by 30% discrepancies of projects by 2025.

8 IDENTIFICATION OF OPTIONS

8.1 Do Nothing

Do nothing means maintaining the status quo. The Association of Consulting Engineers of Zambia has a schedule of fees though not backed by any legal frame. There is no standardisation in pricing of engineering services. One of the biggest consumer of engineering services and products is government through public works. The current status presents a risk of society paying more than is necessary for public goods. This can put a huge burden on the present and future generations. Private firms and individuals may also be exploited as they engage in engineering contracts. Some categories of engineering professionals are vulnerable to exploitation.

The do nothing option presented consumers and providers of engineering services an opportunity to bargain without following minimum charge out rates. This situation led to substandard service delivery and overpricing of services as there were no charge out rates to benchmark with. In other cases, it led to exploitation of providers of engineering services.

8.2 Self-Regulation

Self-regulation typically involves a professional group or firm in a particular industry voluntarily developing rules or codes of conduct that regulate or guide the behaviour, actions and standards of those within the group. The group is responsible for developing the self-regulatory instruments, monitoring compliance and ensuring enforcement. Currently the Engineering Institution of Zambia is using the Code of Ethics to address matters to do with professional misconduct while the matters to do with pricing of engineering services has no basis for recourse. The Association of Consulting Engineers as eluded to above has a schedule of fees which in the past attempted to address matters to do with pricing. However, compliance is voluntary and there is no recourse for not abiding to the rules.

8.3 Propose Charge Out Rates

The EIZ Act no. 17 of 2010 gives the Institution authority to come up with fees that should be charged for engineering services and works in Zambia for onward gazetting through a Statutory Instrument. In addition, the Act in Part IV subsection 28 states as follows; "the holder of a practicing certificate shall for professional services rendered charge such fees as the Minister may prescribe, by statutory instrument on the recommendation of the Engineering Institution of Zambia Council".

Under this option, EIZ will prescribe minimum charge out rates (CoR) which will provide both the range of services that can be provided by qualified persons working at various levels of the engineering and technical fields including professional *engineers, technologists, technicians, artisans and craftspersons*. The draft CoR will provide a general description of the level of service that is required to meet a reasonable standard of practice. The CoR will also provide a schedule showing the sets of tariffs of fees that serve as a guideline to determining minimum fees and remuneration to be paid for engineering and technical services that are fair and equitable to all parties.

The charge out rates will address the enablers of corruption and encourage transparency in the rendering of services. Furthermore, they will reduce exploitation and provide an even pricing model for both the service providers and consumers. The existence of these rates will also enable stakeholders to plan and budget effectively.

However, some providers of engineering services may not comply with the charge out rates in the quest to get contracts during procurement processes. The consumers of engineering services, on the other hand, may incite service providers to quote below the minimum charge out rates in order to lower their costs. Nevertheless, deviation from the charge out rates can be observed during evaluation of tenders for projects.

9 COST BENEFIT ANALYSIS

9.1 Comparisons of Costs and Benefits of Options

The institution used the cost-benefit analysis methodology to analyse benefits on the identified options. This methodology was adopted because it is easier to compare parameters of the options considered.

To arrive at some of the benefit estimates, the Institution used the EIZ charge out rates survey report which was concluded in April, 2021. It illustrates the current verses the proposed low and high charge and interprets the inherent benefits in cost. Below is the tabular cost benefit analysis.

COST AN	OST ANALYSIS SUPPORTING THE LISTED BENEFITS COMPARING REGULATED AND UNREGULATED								
S/N	S/N CLASSIFICATION CURRENT Lo/Hi PROPOSED Lo/Hi DELTA L			/Hi	COMMENT (Key Drivers)				
								The General Project Costs Will reduce on the Mid level and highest level competency	
1	ENGINEER C1-C6	33	1,705	243	1577	210	-128	and benefit to consumers of highy skilled manpower.	
2	TECHNOLOGIST C1-C3	33	432	229	414	196	-18	The high side of Technologist will be reduced and over pricing shall be capped.	
								Technicians were highly under remunerated and given wrong categories hence distortion	
								in their rates. This upward adjustment toward Technologist is to align to the desired	
3	TECHNICIAN C1-C3	33	162	198	335	165	173	industry competence obtaining and required.	
								This category shall be clearly aligned and not paid in other category giving creating	
4	CRAFTPERSON C1-C4	33	162	90	177	57	15	disharmony.	

- 1. The General Project Costs Will reduce on the Mid-level and highest level competency and benefit to consumers of highly skilled manpower.
- 2. The high side of Technologist will be reduced and over pricing shall be capped.
- 3. Technicians were highly under remunerated and given wrong categories hence distortion in their rates. This upward adjustment toward Technologist is to align to the desired industry competence obtaining and required.
- 4. This category shall be clearly aligned and not paid in other category giving creating disharmony.

Assumptions

The assumption is that these rates will be accepted by the service providers and consumers as this is the optimum leverage for both service providers and consumers.

OPTIONS	STAKEHOLDERS	COSTS	BENEFITS
Do	Government	Corruption	Open
Nothing		• Exploitation	bargaining
		Uneven pricing model	power
		Lack of	
		transparency	
		• Difficult in	
		planning	
		budgeting	
		No legal	
		framework	
		Unpredictability	
		of costs	
		• huge amounts	
		of public funds	
		are lost due to	
		lack of	
		predictable	

		pricing	
		structures	
	٠	Misconduct in	
		procurement	
	•	Lack of formal	
		knowledge	
Businesses	•	Corruption	Freedom of pricing
	•	Exploitation	
	•	Uneven pricing	
		model	
	•	Lack of	
		transparency	
	•	Difficult in	
		planning	
		budgeting	
	•	No legal	
		framework	
	•	Unpredictability	
		of costs	
	•	Misconduct in	
		procurement	
	•	Lack of formal	
		knowledge	
	•	Collusion in the	
		value chain	
Society /	•	Corruption	Open negotiation on
Consumers	•	Exploitation	pricing
	•	Uneven pricing	
		model	
	•	Lack of	
		transparency	
	•	Difficult in	
		planning	
		budgeting	
	•	No legal	
		framework	
	•	Unpredictability	
		of costs	
	•	Low value for	
		money	
	•	Huge amounts	
		of public funds	
		are lost due to	
		lack of	
		predictable	

		 pricing structures Misconduct in procurement Lack of formal knowledge Compromise on quality Loss of confidence 	
Charge Out Rates	Government	 Change management (Sensitisation, cultural shift, training) 	 Reduced Corruption Reduced Exploitation Even pricing model Transparency Planning budgeting Legal framework in place Predictability of costs Prudence use of public funds Deterrence to procurement misconducts Increased knowledge Quality assurance Increased confidence
	Businesses	• Change management (Sensitisation, cultural shift, training)	 Reduced Corruption Reduced Exploitation Even pricing model Transparency Planning budgeting

	Society		Change management (Sensitisation, cultural shift, training)		Legal framework in place Predictability of costs Prudence use of public funds Deterrence to procurement misconducts Increased knowledge Quality assurance Increased confidence Reduced Corruption Reduced Exploitation Even pricing model Transparency Planning budgeting Legal framework in place Predictability of costs Prudence use of public funds Deterrence to procurement misconducts Increased knowledge Quality assurance
Self	Government	-	Collusion	Racmo	nse to the
	Government	•	Collusion	Respo	
Regulation				needs	of society

	•	Lack of	
		enforcement of	
		pricing models	
	•	Low	
		acceptability	
	•	Creates	
		discrepancies in	
		planning	
		budgeting	
	•	Unpredictability	
		of costs due to	
		lack of legal	
		frame	
	•	Ineffective use	
	•	of knowledge	
Businesses	-	Collusion	Response to the
Dusmesses		Look of	needs of society
	•	Lack Of	needs of society
		enforcement of	
	•	Low	
		acceptability	
	•	Creates	
		discrepancies in	
		planning	
		budgeting	
	•	Unpredictability	
		of costs due to	
		lack of legal	
		frame	
		Ineffective use	
		of knowledge	
Society	•	Collusion	Response to the
	•	Lack of	needs of society
		enforcement of	
		pricing models	
	•	Low	
		acceptability	
	•	Creates	
		discrepancies in	
		planning	
		budgeting	
	•	Unpredictability	
		of costs due to	
		lack of legal	
		frame	

	• Ineffective use of knowledge	

10 SUMMARY

Option	Cost	Benefit	Net Benefit (B-C)
Do Nothing			
Charge Out Rates			
Self-Regulation			

11 STAKEHOLDER CONSULTATIONS

In carrying out stakeholder consultations with both private and public-service providers and consumers as indicated in the table, the Institution employed both active and passive methods of consultations through physical meetings, virtual meetings, emails and electronic surveys. The active methods include face to face and virtual meetings throughout the country. Passive consultation was done through the notice and comments on the EIZ website and the Business Regulatory Review Agency (BRRA) portal. Further, part of the passive consultation was done through emails, EIZ social media platforms.

An analysis of the stakeholders' responses is presented in the table below:

STAKEHOLDER CLUSTER INSTITUTIONS	STAKEHOLDER	METHOD OF CONSULTATION	STAKEHOLDER COMMENTS	ACTION TAKEN
Government	• Local	Questionnaire	•	•
Institutions	Authorities	Survey		
	• Higher	• Letters /		
	Education	Request for		
	Authority	Comments		
	Industrial			
	Development			
	Corporation			
	• Ministry of			
	Infrastructure,			
	Housing &			
	Urban			
	Development			
	• Ministry of			

	Labour
	Labour
	• Ministry of
	Transport &
	Logistics
	• Ministry of
	Works & Supply
	Norks & Suppry
	• National
	Pensions
	Scheme
	Authority
	National Council
	for Construction
	National Road
	Fund Agency
	• Road
	Development
	Agency
	• TEVETA
	Water Utilities
	• Zambia National
	Service
	Zambia
	• Zambia Ovelification
	Quanneauon
	Agency
	• ZESCO
Professional	Association of Questionnaires
Bodies	Consulting • Public hearings
	Engineers of Secular for
	Zambia comments
	• Chamber of
	Mines
	• Economic
	Association of
	Zambia
	• Information &
	Communications
	Technology
	Association of
	Zambia
	National Science
	Protocology
	a recimology

	 Surveyors Institute of Zambia Zambia Institute of Architects Zambia Institute of Manufacturing Zambia Institute of Real Estate Agents Zambia Institute of Purchasing & Supply 			
Learning	Copperbelt	• Secular for	•	•
Institutions	University Copperstore	E consultations		
	• Coppersione University	 Duestionnaires 		
	Evelyn Hone	Questionnanes		
	College			
	• KGTRC			
	Mulungushi			
	University			
	National			
	Institute of			
	Public			
	Administration			
	National Science			
	Centre			
	 Northern Technical 			
	College			
	Trades Schools			
	 University of 			
	Lusaka			
	• University of			
	Zambia			
	• Zambia Air			
	Service Training			
	Institute			

	• Zambia College		
	Environment		
Regulators Engineering Organisations	 Competition and Consumer Protection Agency Energy Regulation Board Rural Electrification Authority Zambezi River Authority Zambia Bureau of Standards Zambia Information & Communications Technology Authority 	 Questionnaire Survey Letters / Request for Comments 	•
General Public	 Avic International Barrick Lumwana Copper Energy Coporation Chilanga Cement Civil Society Leaders Community Leaders First Quantum Minerals Kalumbila Mine Konkola Copper Mines Lubambe Copper Mines Lusemfwa Hydro Market Leaders Mopani Copper 	 Public hearings Secular for comments Notice & comments / Newspaper adverts E-consultations / Surveys 	

	Mines Plc Private Companies Ward Development Councilors Zambia Sugar ZEMFA			
International Organisations	 International Labour Organisation United Nations Development Programme Irish Embassy GIZ Japan International Cooperating Agency Millennium Challenge 	 Questionnaire Survey Letters / Request for Comments 	•	•

12 SELECTING THE PREFERRED OPTION

The Engineering Institution of Zambia selected Charge Out Rates option as the best option that will provide maximum benefits. The results from the cost-benefit analysis showed that this option will produce the maximum benefits. The Charge Out Rates are expected to address collusion among the players in the engineering services sector, reduce discrepancies in the pricing of engineering services, enhance planning and budgeting and ultimately create confidence in the consumers of engineering services.

This option will be effectively implemented assuming that the stakeholders have full acceptance of the proposed legislation. However, the institution anticipates relative inertia from some service providers during the initial stages of implementation arising from potential loss of marginal profits.

13 IMPLEMENTATION, MONITORING AND EVALUATION PLAN

Strategic Objective	Activities	Output	Outcome	Performance Indicator	Responsible Institutions	Baseline (2023)	Grand Target	2024	2025	2026	2027	2028
To provide a schedule of minimum charge out fees for engineering professionals in order to create an even pricing model and enhance budgeting and planning for massive infrastructure development by 2025.	Publish flier of Charge Out Rates Distribute the Charge Out Rates fliers	Charge Out Rates published	Informed stakeholders	Number of media tools used	EIZ Engineering firms Engineering professionals	0 0 0	10 2,000 20,000	10 400 5,000	10 400 5,000	10 400 5,000	10 400 5,000	10 400 5,000
To provide a schedule of minimum charge out fees for engineering professionals in order to protect engineering service	Publish flier of Charge Out Rates Distribute the Charge Out Rates	Charge Out Rates published Skills developed	Informed stakeholders Increased compliance to standards Fairness	Number of media tools used Number of training sessions on Charge Out	EIZ Engineering Firms Engineering professionals	0 0 0	10 2,000 20,000	10 400 5,000	10 400 5,000	10 400 5,000	10 400 5,000	10 400 5,000
To ensure transparency in the pricing of engineering services in order to reduce by 30% discrepancies in projects by 2028.	Develop Tracking system Implement the tracking system Conduct compliance inspections Run campaigns / adverts	Tracking system developed	Increased better implementation of findings of monitoring reviews	Percentage increase in closed findings	ZPPA EIZ Engineering Service Providers Consumers	0%	30%	5%	10%	15%	20%	30%

14 CONSULTATION DOCUMENT/QUESTIONNAIRE

The Engineering Institution of Zambia has been working on standard charge out rates for engineering services in the country. The objective of the charge out rates is to ensure an even pricing model in the service delivery and value for money in the execution of engineering works. Additionally, this initiative corresponds with government's effort in addressing the cost of doing business.

Your contribution on the subject is important to us as it will enable make an all-inclusive decision.

Kindly complete the questionnaire below to submit your input:

- 1. Tick your appropriate category / categories
 - a. Engineering service provider (Engineering professional / firm)
 - b. Engineering service consumer
 - c. Government representative
 - d. Other, specify below
- 2. What do you think about EIZ introducing charge out rate for engineering services?
 - a. Yes
 - b. No
 - c. Not sure
- 3. If your answer above is (a) or (b) give a reasons

- 4. Will introducing these charge out rates provide an even pricing model for both the service provider and the consumer?
 - a. Yes
 - b. No
 - c. Not sure
- 5. Do you think the charge out rates will reduce exploitation for both engineering service providers and consumers?
 - a. Yes
 - b. No
 - c. Not sure
- 6. Do you think introducing these charge out rates will improve quality in service delivery?
 - a. Yes
 - b. No

- c. Not sure
- 7. Do you think charge out rates will promote transparency in engineering services?
 - a. Yes
 - b. No
 - c. Not sure
- 8. Do you think the charge out rates will help in planning and budgeting?
 - a. Yes
 - b. No
 - c. Not sure
- 9. Currently there is no legal framework to govern pricing for engineering services. Would you recommend that this framework is put in place?
 - a. Yes
 - b. No
 - c. Not sure
- 10. Will the charge out rates help to predictability of costs?
 - a. Yes
 - b. No
 - c. Not sure
- 11. Do you think the charge out rates will promote the prudent use of public funds?
 - a. Yes
 - b. No
 - c. Not sure
- 12. Do you think the charge out rates will deter procurement misconducts?
 - a. Yes
 - b. No
 - c. Not sure
- 13. Do you think the charge out rates will enhance fairness in participating in large scale jobs?
 - a. Yes
 - b. No
 - c. Not sure
- 14. Do you think the charge out rates will improve quality assurance?
 - a. Yes
 - b. No
 - c. Not sure
- 15. Do you think the charge out rates will increase confidence in the provision of engineering services?
 - a. Yes
 - b. No
 - c. Not sure
- 16. Do you think the charge out rates will respond to the needs of society?
 - a. Yes
 - b. No
 - c. Not sure

- 17. What is your opinion of the Charge Out Rates?
 - a. Fair
 - b. Not fair
 - c. No sure

For your additional comments please fill in the box below:

15 Charge Out Rates

	FIZ	YEARS OF	APPLICABL	E HOURLY	DESPONDENT'S	
CLASS	CI ASIFICATION	VALUABLE	RATE FE	E UNITS	COMMENTS	
	CLASIFICATION	EXPERIENCE	MINIMUM	MAXIMUM	COMMENTS	
ENCINEED C1	Fellow	20 years and above	1 212	1 577		
	Professional Engineer	20 years and above	1,215	1,377		
ENGINEER C2	Fellow	15 years and above	758	986		
ENGINEER C2	Professional Engineer	15 years and above		700		
ENGINEER C3	Fellow	10 years and above	606	788		
	Professional Engineer	To years and above	000	700		
ENGINEER C4	Professional Engineer	5 years and above	456	593		
ENGINEER C5	Professional Engineer	2 years and above	304	395		
ENGINEER C6	Associate Engineer	0 - 2years	243	316		
TECHNOLOCISTS C1	Professional	6 years and above	318	414		
	Full Technologist	0 years and above	510	414		
TECHNOLOGISTS C2	Full Technologist	3 - 6 years	274	356		
TECHNOLOGISTS C3	Trainee Technologist	0 - 3 years	229	297		
TECHNICIAN C1	Certified Technician	6 years and above	258	335		
TECHNICIAN C2	Full Technician	2-6 years	229	297		
TECHNICIAN C3	Trainee Technician	0 - 2 years	198	258		
CRAFTSPERSON C1	Master Craftsperson	10 years and above	136	177		
CRAFTSPERSON C2	Full Craft Person	2 - 10 years	122	158		
CRAFTSPERSON C3	Trainee Craft person	0 - 2 years	106	137		
CRAFTSPERSON C4	Skilled person	0	00	116		
	Trade Test 1-3	0	90	110		

Note: 1.00 Fee Unit = ZMW 0.30 A person Employing these professionals should not less than 60% of the Charge Out Rates.