PROCUREMENT IN OCEAN ROAD CANCER INSTITUTE:
THE ROLE OF SPECIFICATION

By

Nancy Focas Kisaka

A Dissertation Submitted to Mzumbe University in Partial Fulfillment of the Requirements for the Award of Master of Science Degree in (Procurement & Supply Chain Management) of Mzumbe University
2013
CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation entitled **Procurement in ocean road cancer institute: the role of specification**, in partial/fulfillment of the requirements for award of the degree of Master of Science in Procurement and Supply Chain Management of Mzumbe University Dar es Salaam Campus.

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DEDICATION

I would like to dedicate this study to my beloved family Desderi, Delicia and Deshawn Wengaa, who always made me happy, busy and in a way understood the importance of education while young and hence allowed me to leave them lonely and pursue studies to the extent of making me be what I am now. You are my children of great respect and people of great family who deserve this work.
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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>ASTAM</td>
<td>The American Society for Testing Materials</td>
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<tr>
<td>AUSFTA</td>
<td>Australia – United States Free Trade Agreement</td>
</tr>
<tr>
<td>APP</td>
<td>Annual Procurement Plan</td>
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<tr>
<td>PSPTB</td>
<td>Procurement and Supplies Professionals and Technicians board</td>
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<td>ORCI</td>
<td>Ocean Road Cancer Institute</td>
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<tr>
<td>PMU</td>
<td>Procurement Management Unit</td>
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<tr>
<td>PPRA</td>
<td>Public Procurement Regulatory Authority</td>
</tr>
<tr>
<td>PPA, 2004</td>
<td>Public Procurement Act No. 21 of 2004</td>
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<tr>
<td>URT</td>
<td>United Republic of Tanzania</td>
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ABSTRACT

Specification is a document which clearly, accurately and completely describes the essential requirements of the goods or service being purchased. It’s a detailed statement providing a description or list of characteristics or requirements laid down for materials, components process or services (Bairly, 1996). It is also defined as description or detailed instruction provided in conjunction with product plans or a purchase order. Specifications may stipulate the type of materials to be used, special construction techniques, dimensions, colors, or a list of the qualities and characteristics of a product. It is a detailed, exact statement of particulars, especially a statement prescribing materials, dimensions, and quality of work for something to be built, installed, or manufactured. It is always important that specifications be comprehensive and accurate.

The key objectives of this study were, to determine how specification for various tenders are being prepared by ORCI, to investigate the relationship between procurement qualifications and adherence to specification in tendering process as well as to examine how poor specification affect ORCI service provision.

Basing on the discussion of the findings, researcher find that the process of developing the specification document involve many different actors. Each actor has to perform their duties more effectively and efficiently. Failure of one actor might cause the failure of the whole process hence wastage of time and financial resources. According to the findings there is a lot of shortcoming if the specification document will be poor. The poor document will cause wastage of financial resources and energy, it may lead to the acquiring of the poor quality and the item of the poor standards, it waste time and it is too risks as it may cause death once the facility procured provides wrong results.
CHAPTER ONE
INTRODUCTION AND BACKGROUND INFORMATION

1.1 Introduction
In procurement process, planning is believed to provide the procuring agency or department with unbiased and objective information regarding the performance in the supply link (Thomas, 1999). It is a normal practice for all procuring entities to be involved in the procurement process of goods, consultancy and non-consultancy services and procurement of works. Though planning is a vital thing to be considered in carrying out these functions, yet its fundamental matter for procuring entity to ensure that they appropriately and adequately knowledgeable with the required specifications for their expected deliveries. Any failure to the adherence and sticking on the required specifications, will lead the procuring entity to have poor procurement proceedings which as a result will amount into increasing costs for various variables.

Specifically, the objective of public procurement principles among others is to ensure the procuring entities consider achieving effective quality assurance to whatsoever they will procure. It is from this base where there is high emphasis from both Procurement and Supplies Professionals and Technicians board (PSPTB) and Public Procurement Regulatory Authority (PPRA) on the need for the public institutions to employ qualified Procurement and Supplies officers who can contribute towards preparing appropriate specifications which will enable their institutions avoid loses.

The Ocean Road Cancer Institute cannot escape from this important function of procurement process which cares to be initiated in drafting the specifications to ensure they cut across the intended purposes. Thus the main objective of this study was to examine the causes of poor specification in public sector Ocean Road Cancer Institute be the case. The area of focus was on how the institute specifies its deliveries, the key challenges facing the procurement process as well as the causes of poor specification process at the Institute.
1.2 Background Information

Currently, the public institutions have increased their expenditures in procurement of goods, works and consultancy services. The government has been increasing its funds to finance several activities of different institutions so as to ensure that the institutions produce benefits which will satisfy the public. In fact the public institutions are trying to be committed to provide services to the public in an efficient and effective manner. Actually the government can win the trust of its citizens through its institutes.

The process of providing satisfactory services to the public involves an activity of procurement of different items. It’s from this juncture several problems have been raised concerning delivery of poor products or services which in turn has forced the public to question the government’s credibility in providing services to its citizens.

The procurement process calls for having proper specifications for products to be ordered and services to be delivered so as to increase efficiency and effectiveness in the procurement proceedings of which will lead an organization to achieve the value for money, effective quality assurance, reducing costs, increasing surpluses and finally the procuring entity is able to acquire what has intended to get.

Developing proper specifications for goods and services is an inevitable task which is actually important and vital. It’s an assignment which emphasizes that a well-defined specification may result to the reduction of cost which is the key factor of increasing profit to both profit and nonprofit making organizations; it can also lead into an increase of surplus as well as reputation of the institution.

There are several consequences that are likely to face institutions which are not specifying their products and services correctly by the time of ordering which include institution experience high costs in form of dormant stocks, disruption of production process due to use of poor inputs as well increasing wastage in the production process. Specification should be developed to define the need in such a
manner that compliance with the specification insures acceptability of product purchased (Stuart et al, 1999).

The Ocean Road Cancer Institute and substantially has been spending a lot of its budgets in procuring of both consultancy services, works – construction projects and also procurement of tangible items (goods). Procurement as one of the functions of the ORCI is facing many challenges from both suppliers and even procurement of specialists.

The government through Controller and Auditor General has reported about 80% of government budget is on procurement and apart from that poor procurement proceedings have resulted to huge losses to the government. One of the areas noted is poor specifications which are prepared for the products and services to be ordered from different suppliers. (National Audit Report 2009)

It has been assumed that care should be taken in preparation of the specifications. Specifically before starting to endorse the process of preparing them, the responsible officer should use professional competences, skills and experiences in matching between the required product and its specifications against the source for it. This call for ensuring that what has been specified can be delivered from the market and actually this can be done if there is sufficient and reliable information.

Armed with good upfront information, one should be able to prepare a good set of specifications and credible costs estimates. It has been noted that when projects proves failure the mostly thing contractor’s or supplier’s lawyers will do is to examine the specifications provided to find out a number of errors and inconsistencies in them that they can claim to have misled their client. The party responsible for the losses is then the party who drafted the defective specifications (Dobler et al, 1996).

1.3 Statement of The Problem
The current procurement reforms in Tanzania have resulted into enactment of Public Procurement Act 2004 which emphasizes the need to procure goods and services
within the applicable norms and values. The act stresses the need for the professionals to abide to the requirements of the laws and regulations in executing fair and value for money procurement which will emphasize on proper preparation of specifications.

Poor specifications can lead into poor deliveries of goods and services and subsequently will increase operating cost to the institution. Good specifications will enable the entity to yield proper purchases as well be able to meet its objectives (Wynstra et-all, 1999.)

The Procurement Management Unit of ORCI is striving to implement the requirement of the law especially by encouraging user departments to ensure the appropriately identify specifications for their needs. User departments and some of the units of the ORCI are buying their own needs direct from suppliers. This result into preparation of poor specifications which causes the Institute to incur huge loses while the officials are accumulating substantial gains from these poor and weak specifications. (Ocean Road Cancer institute, 2009.)

Despite all the efforts to ensure that the PMU is adhering to the requirement of the Law, yet there is some poor specification providing adequate specifications in part of user department which is still leading the Agency into getting losses due to these practices.

The problems above influenced the researcher to study comprehensively the causes of poor specifications at ORCI. This study helped the researcher to come out with recommendations which will enhance adequate preparation of specifications at ORCI.

1.4 Objectives of the Study

1.4.1 General objectives

The broad objective of this study was to investigate causes of poor specification at Ocean Road Cancer Institute.
1.4.2 Specific Objectives

Specifically this study had the following objectives:

- To determine how specification for various tenders are being prepared by the agency

- To investigate the relationship between procurement qualifications and adherence to specification in tendering process.

- To examine how poor specification affect ORCI service provision

1.5 Research Questions

1.5.1 The general question of this research was;

To examine the role of specification in the procurement process in Ocean Road Institute

1.5.2 Specific research Questions of this study were;

- What are the causes of poor specifications to public institutions?

- How does procurement qualifications and adherence to specification affect tendering process?

- How does poor specification affect ORCI service provision?

1.6 Significance of the study

1) The study provides suggestions and recommendations that will help the institute to improve tendering processes which is highly associated with appropriately preparing proper specifications for tendering purposes.

2) The research findings enlighten prospected procurement and supplies officers the need to be acquainted with adequate knowledge that is sufficient to facilitate poor specifications during tendering assignments.

3) This study would enable the researcher to obtain her award for the Master of Science in Procurement and Supply Chain Management.(MSC-PSCM)
4) This study shows the possibility of conducting further studies to candidates interested in pursuing studies in this area. Particularly they can sincerely extend their efforts in the areas which are not covered by this study.

1.7 Scope of the Study

Scope of the study
The study focused on poor specification by concentrating on causes of poor specification in Public sector. The study investigated clearly the causes of poor specification and furnish with the recommendations that will help the institute to improve tendering processes which is highly associated with appropriately preparing proper specifications for tendering purposes. It emphasized that, a well-defined specification may result to the reduction of cost which is the key factor on increasing profit to those profits making organizations and surplus as well as reputation to those organization which are non-profit making. Technical questions were constructed in order to provide open door for the officials to expose the necessary information required. The sample size was of minimum size which allowed the meaningful stratification of the respondents based on time provided for the research and financial position of the researcher. (Emmet, 2005).

1.8 Limitation of the study:

In conducting this study, a researcher faced some obstacles which in one way hinder the effectiveness of the study.

Limit of the exposure of some information by the relevant officials, that is, some information was not accessible due to their confidentiality and willingness of the respondents to provide more information by being busy with their activities or even failure to return the questionnaires.

Availability of funds to enable smooth conduct of the exercise, time factor in regarding to exhausting enough materials while also the allowances to pay for the interviewee was the hindrance. This is due to the nature of the topic that is very extensive to conduct the study. These in combinatorial hindered the activity.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This part of this research analyzed various literature reviewed in connection to the study under review. These literatures provided the conceptual framework of this study.

2.2 Conception of Procurement
Procurement is acquisition of goods, services or works from an external source. It is favorable that the goods, services or works are appropriate and that they are procured at the best possible cost to meet the needs of the purchaser in terms of quality and quantity, time, and location. Corporations and public bodies often define processes intended to promote fair and open competition for their business while minimizing exposure to fraud and collusion.

2.2.1 Procurement process
Procurement may involve bidding process known as tendering. A company or organization may require some product or service. If the price exceeds a threshold that has been set example by government department procurement policy, “any product or service desired whose price is over X must be put to tender”), depending on policy or legal requirements, the purchaser is required to state what is required and make the contract open to the bidding process. The concept of total cost also comes into play. At times, not just price, but other factors such as reliability, quality, flexibility and timing, are considered in the tendering process. A number of potential suppliers then submit proposals of what they will provide and at what price. Then the purchaser will usually select the lowest bidder; however if the lowest bidder is deemed incompetent to provide what is required despite quoting the lowest price, the purchaser will select the lowest bidder deemed competent. In the European Union, strict rules on procurement must be followed by public bodies, with contract value thresholds determining the processes required (relating to advertising the contract, the actual process) (Benslimane et al. 2005).
2.2.2 Procurement steps

Procurement life cycle in modern businesses usually consists of seven steps:

- **Identification of need**: This is an internal step for a company that involves understanding of the company needs by establishing a short term strategy (three to five years) followed by defining the technical direction and requirements.

- **Supplier Identification**: Once the company has answered important questions like: Make-buy, multiple vs. single suppliers, then it needs to identify who can provide the required product/service.

- **Supplier Communication**: When one or more suitable suppliers have been identified, request for quotation, request for proposal, request for information, or request for tender may be advertised or direct contact may be made with the suppliers. References for product/service quality are consulted, and any requirements for follow-up services including installation, maintenance, and warranty are investigated.

- **Negotiation**: Negotiations are undertaken and price, availability, and customization possibilities are established.

- **Supplier Liaison**: During this phase, the company evaluates the performance and any accompanying service support, as they are consumed. Supplier scorecard is a popular tool for this purpose.

- **Logistics Management**: Supplier preparation, expediting shipment, delivery, and payment are completed, based on contract terms. Installation and training may also be included (*ibid*).

2.2.3 Procurement systems

According to Caldwell, *et al.*, (2009) Another common procurement issue is the timing of purchases. Just- in- time is a system of timing the purchases of consumables so as to keep inventory costs low. Just-in-time is commonly used by Japanese companies but widely adopted by many global manufacturers from the 1990s onwards. Typically a framework agreement setting terms and price is created between a supplier and purchaser, and specific orders are then called off as required.
On the other hand the term procurement refers to the act of obtaining or buying goods and services. The process includes preparation and processing of a demand as well as the end receipt and approval of payment. It often involves
(1) purchase planning
(2) standards determination,
(3) specifications development,
(4) supplier research and selection,
(5) value analysis,
(6) financing,
(7) price negotiation,
(8) making the purchase,
(9) supply contract administration,
(10) inventory control and stores, and
(11) disposals and other related functions.

The process of procurement is often part of a company’s strategy because the ability to purchase certain materials will determine if operations will continue. A business will not be able to survive if it’s price of procurement is more than the profit it makes on selling the actual product *(Ibid)*.

### 2.2.4 Procurement Management

Procurement Management is a process that gives a complete procurement process and procurement procedures which explain step-by-step, how to purchase from suppliers. You will learn how to issue Purchase Orders, receive and approve deliveries, endorse supplier payments and manage suppliers against their contracts.

This procurement process helps to:
- Identify the goods and services to procure
- Complete Purchase Orders and issue to suppliers
- Agree on delivery timeframes and methods
- Receive goods and services from suppliers
- Review and accept the items procured
- Approve supplier payments
This Procurement Management Process enables to:

- Identify supplier contract milestones
- Review supplier performance against contract
- Identify and resolve supplier performance issues
- Communicate the status to management

Procuring goods and services from external suppliers can be a critical path for many projects. Often, the performance of the supplier will reflect on the performance of the overall project team. It’s therefore crucial that you manage your supplier’s performance carefully, to ensure that they produce deliverables which meet your expectations. This Procurement Management Process helps you do this to get the most out of your external supplier relationships. (Caldwell, et al, 2009)

2.3 Procurement Management Process

According to Caldwell, et al (2009), A Procurement Management Process or Procurement Process is a method by which items are purchased from external suppliers. The procurement management process involves managing the ordering, receipt, review and approval of items from suppliers. A procurement process also specifies how the supplier relationships will be managed, to ensure a high level of service is received. This is a critical task in Procurement Management. In essence, the procurement process helps you “get what you have paid for”.

On the other hand, Benslimane et al. (2005) pointed out about the time when the procurement management process used, what are the delays and its causes, the importance of avoiding delays, the one who is responsible to avoid delays and what can be done to avoid delays as explained here under;

2.3.1 When does Procurement Management Process used?

You need to implement a Procurement Process any time you want to buy items from external suppliers. By using this Procurement Management Process, you can ensure that the items provided meet your need. It also helps you manage the supplier relationship, ensuring that any issues are resolved quickly. By implementing a Procurement Process, you can ensure you get the maximum value from your supplier relationship.
What are delays in the procurement process?
Delays in the public procurement process are any constraint that prevents procurement events from taking place in accordance with the procurement plan and schedule.

2.3.2 What causes delays in the procurement process?
Some common causes of delays in the procurement process are:

- Failure to properly plan all procurement events and to use the appropriate procurement method.
- Requesting entity fails to submit procurement requests on time consistent with the procurement plan and schedule.
- Technical specifications, scope of work or terms of reference prepared later than scheduled.
- Procuring Entity receives incomplete technical specifications, scope of work or terms of reference.
- Evaluation panel not formed in time to begin the evaluation process as scheduled.
- Evaluation Panel taking more time than allotted to evaluate bids or proposals.
- Protracted contract negotiations.
- Reviewing and approving authority taking more time that allotted to review and comment on documents sent for approval.

2.3.3 Why is it important to avoid delays in the procurement process?
Avoiding delays in the procurement process not only saves time and money, it also permits the timely award of contracts. A delayed contract award could cause a chain reaction of delays on other dependent procurements. This is especially important in project procurement management because it could delay the completion of the project.
2.3.4 Who is responsible for avoiding delays in the procurement process?
All stakeholders; the procuring entity, evaluation panel members, approving authority, requesting entity, etc, involved in the bidding, evaluation and selection phase are responsible for making every effort to avoid delays in the procurement process. No single department can do this. It has to be a collaborative effort.

2.3.5 What can be done to minimize delays in the procurement process?
To minimize delays in the procurement process it’s important to ensure:

- A realistic determination is made of the availability of a market to satisfy the need.

- The appropriate procurement method is assigned to the requirement because this is important for estimating the procurement lead-time.

- The need for external assistance to prepare the technical specifications, scope of work or terms of reference of the requirement has been considered.

- An evaluation panel with the proper technical skills is identified, selected and approved early enough and is available to begin the evaluation process on schedule.

- The approving authority will be available and is committed to reviewing and approving procurement documents within an agreed timeframe.

The material selection and procurement/purchasing processes are currently not very well standardized. The thousands of product manufacturers each produce their own product data publications, usually deliberately unique so as to distinguish themselves from their competition. Attempts to standardize construction product data have mostly failed due to the extreme decentralization of production and reluctance of manufacturers to cede control of their data to central database organizations.

The recent growth of Internet product information sites has not improved the situation at all, because the only method of search is by keyword, which seldom provides enough information to make an intelligent selection within a reasonable
time frame. In addition, there are few software tools that attempt to provide assistance in material selection, mostly because the process is so data-intensive and third-party management of the data is too expensive to be practical.

E-commerce in the construction industry is hampered by the myriad ways different manufacturers index or identify similar or identical products. This is more of a problem in construction than in retail or consumer industries because construction is custom work and competitive bidding/pricing is required on each project more often than not. Lack of a standardized way to state product requirements requires unique, custom-prepared documents for each bid or pricing event.

**Expected Benefits:** Material specification, selection and procurement processes cross over all disciplines of architecture, engineering and construction. All the current software products that implement parts of these processes will benefit from an analysis of the overall process. At the micro level, individual applications should be able to use the analysis to improve their capabilities. At a slightly higher level, they should be able to more effectively exchange information with related applications. At the highest level, new software tools that utilize standardized product information would improve the overall process, lessen the time required, and improve accuracy. (Benslimane et al. 2005)

E-commerce would be greatly facilitated by this standardization. Purchasers would more easily find equivalent products, increasing competition and allowing smaller organizations to compete more effectively. For the IAI, this project should draw the interest of the many new companies involved in business-to-business commerce via the Internet.

Lewis et al (2009) pointed out the following guiding principles which govern the administration of public procurement;

2.4 **The twelve (12) guiding principles which govern the administration of public procurement are;**

1. **Accountability** - Effective mechanisms must be in place in order to enable Departmental Accounting Officers and their equivalents in other public bodies
to discharge their personal responsibility on issues of procurement risk and expenditure.

2. **Competitive Supply** - Procurement should be carried out by competition unless there are convincing reasons to the contrary.

3. **Consistency** - Suppliers should, all things being equal, be able to expect the same general procurement policy across the public sector.

4. **Effectiveness** - Public bodies should meet the commercial, regulatory and socio-economic goals of government in a balanced manner appropriate to the procurement requirement.

5. **Efficiency** - Procurement processes should be carried out as cost effectively as possible.

6. **Fair-dealing** - Suppliers should be treated fairly and without unfair discrimination, including protection of commercial confidentiality where required. Public bodies should not impose unnecessary burdens or constraints on suppliers or potential suppliers.

7. **Integration**: - In line with the National policy on joined-up government, procurement policy should pay due regard to the Executive’s other economic and social policies, rather than cut across them.

8. **Integrity**: - There should be no corruption or collusion with suppliers or others;

9. **Informed decision-making** - Public bodies need to base decisions on accurate information and to monitor requirements to ensure that they are being met.

10. **Legality** - Public bodies must conform to European Union and other legal requirements.

11. **Responsiveness** - Public bodies should endeavor to meet the aspirations, expectations and needs of the community served by the procurement.

**Transparency** - Public bodies should ensure that there is openness and clarity on procurement policy and its delivery.

### 2.5 Conceptualization of Specification

Benslimane *et al.* 2005 conceptualized specification as a description of the physical or functional characteristics, or of the nature of a supply, service, or construction
item; the requirements to be satisfied by a product, material, or process indicating, if appropriate, the procedures to determine whether the requirements are satisfied. In essence a specification is a statement of the attributes of a product, process or service a user wishes to purchase, and consequently, which the supplier is expected to supply. As far as practicable, it is desirable that the requirements be expressed numerically in terms of appropriate units together with their limits.

Specifications have two basic functions:

1) **Communicate**: When prepared by the purchaser, specifications inform the supplier what is required. When prepared by the supplier they provide a prospective purchaser with a description of the attributes of a product.

2) **Compare**: Specifications also provide criteria against which the products and services supplied or available can be compared.

### 2.5.1 Types of Specifications

**There are basically three types of specifications:**

1. **Functional Specifications**: A functional specification is a clear indication of the purpose, function, application and performance expected of the supplied material or service, whereby the supplier is allowed or encouraged to provide an appropriate product. These specifications describe the capabilities that the article where applicable, performance specifications are to be selected as they allow wider competition and enable suppliers to suggest new or improved ways of meeting the requirement. Tests or criteria are developed to measure a product's ability to perform and to last, as required.

2. **Technical / Design Specifications**: This specification details the characteristics of the product to be purchased, it is so detailed that it describes how the product is to be manufactured, detailing the physical dimensions of the product and materials to be used etc. (Most often used for building contracting and roads)

3. **Combination**: These specifications include both design and functional features. Characteristics of both are used as prerequisites and as limiting factors in developing the specification. A specification should be sufficiently detailed so that the product or
service will fit the users requirements. It should not be so explicit that it prevents negotiation or discourages buyers or suppliers from using their expertise to propose alternative solutions that may offer better value for money. Preparation of a specification should involve close communication between the user and the Procurement and Supply Chain Manager and, if required, assistance from technical experts. Involvement of potential suppliers may also be helpful in developing a specification. (Benslimane et al. 2005).

Lewis et al, (2009), pointed out the criteria which needed to be considered while preparing the specification as follows;

2.5.2 The key criteria to be considered while preparing the specification:
Use functional and performance criteria where possible.

- Any technical specifications should be defined by reference to any European, International, National and quality assurance requirements, which are relevant.
- References, which have the effect of favoring or eliminating particular suppliers, contractors, products or services, should be avoided.
- It is not normally permitted to use brand names, sources of supply, trademarks, patent types, origins or other means of production when writing product specifications. The exception is when the goods and services cannot otherwise be described by reference to technical specifications, which are sufficiently precise and intelligible to all suppliers.
- There are, however, instances where it is permissible to derogate from the prescribed hierarchy of specifications. Again, like other exceptions, these are clearly defined. For example, where there exists a statutory duty in relation to, say, health and safety; technical reasons of conformance; incompatibility or disproportionate technical differences or disproportionate costs; or innovative reasons.

2.6 Conceptual Definitions

2.6.1 Specification:
There are several definitions that have been given to define this term. It is a concise statement of a state of requirements to be specified by a products specifying of
materials technically resulting to the knowing of what exactly the buyer want to buy. Hence if someone has been assigned in the house to buy rice then should be informed (specified) with the quality of rice to be purchased unambiguously. (Gapaladrishnan, 2004).

According to (Doubler (1996) specification involves the detailed method of describing requirements, various types of designed specifications are the detailed description of materials, parts and components to be used in making products, those description may tell the supplier exactly what needed by the buyer or what requirements the buyer needs to buy.

Specification is a document which clearly, accurately and completely describes the essential requirements of the goods or service being purchased. It’s a detailed statement providing a description or list of characteristics or requirements laid down for materials, components process or services (Bairly, 1996).

It is also defined as description or detailed instruction provided in conjunction with product plans or a purchase order. Specifications may stipulate the type of materials to be used, special construction techniques, dimensions, colors, or a list of the qualities and characteristics of a product. It is a detailed, exact statement of particulars, especially a statement prescribing materials, dimensions, and quality of work for something to be built, installed, or manufactured. It is always important that specifications be comprehensive and accurate.

2.6.2 Procurement
Procurement of materials, supplies, equipment and services is one of several important functions of any organization. While non-personnel spending represent a relatively small part of the operating budget, procurement of commodities and services is essential for the day to day operations of the organization. Managing procurement, however, is frequently a complex and time-consuming process due to laws and rules that govern public procurement. (Koppelmann, 1998).

Procurement is the process of buying, purchasing, renting, leasing or otherwise acquiring any goods, works or services by a procuring entity spending public funds
on behalf of a ministry, department or regional administration of the Government or public body and includes all functions that pertain to the obtaining of any goods, works or services, including description of requirements, selection and invitation of tenderers, preparation and award of contracts (PPA No. 21 Section 3(1)).

2.6.3 **Procurement specialist:**
Means a person who is engaged in a profession, occupation or calling in which resource to procurement is directly or indirectly involved and has such knowledge and experience of the practice of procurement and has been certified or registered by the procurement professional body. (PPA, 2004)

2.6.4 **Procurement process:**
Procurement process is a successive stages in the procurement cycle, it includes; planning, choice of procedures, measures to solicit offers from tenderers, examination and evaluation of those offers, award of contract and contract management (PPA No 21 Section 21(3)).

2.6.5 **Procurement proceedings:**
Procurement proceedings mean the proceedings to be followed by a procuring entity or any approving authority when engaging in procurement (PPA, 2004).

2.7 **Analysis of Related Theories**

**Technical Specifications**

Technical specifications are one of the most important elements of procurement. They provide detailed information to suppliers about the goods to be purchased. They are the benchmarks against which the purchaser will judge the technical responsiveness of suppliers bids. They form the basis for the contractual obligation of the supplier to the purchaser. They are the criteria against which the purchaser will determine the acceptability of specific goods prepared by the supplier for shipment.

- Technical specifications must be clear, accurate, and complete; otherwise, the procurement will not be able to proceed on schedule and the entire procurement process may need to be cancelled. For example: Questions raised by suppliers can force the procuring entity to delay the deadline for bid
submission to accommodate amendments to the bidding documents. A significant number of suppliers may misunderstand the requirements and quote items that do not meet program needs, forcing the procuring entity to reject all bids and restart the process. It may be impossible for the evaluation committee to correctly identify a winning bid, and if one is chosen for any other reason than what is specifically stated in the bidding documents, supplier protests may result. Goods that do not meet program needs may be delivered because the supplier is under no obligation to supply goods other than what is specifically described in the technical specifications included in the contract. Under any of the above scenarios, time and resources will be wasted at a minimum; the delivery schedule will be delayed. More importantly, needs will not be met, legal problems may ensue, misprocurement may be declared, and funding may be lost. In addition to specifications that are clear, accurate, and complete, public-sector procurement requires that specifications be prepared in a way that will encourage maximum competition. They must be “product neutral.” In other words, they must use generic terms, relative characteristics, and performance requirements rather than brand names and superficial descriptions. If there is no way to avoid stating a brand name, it must be followed by “or equivalent”. Nonfunctional requirements such as color and exact dimensions must be (Lewis et al, 2009).

Procurement Capacity Toolkit
- Specifications must be written in industry standard vocabulary so there is no question about what is required.
- A well-designed, comprehensive procurement specification is a health program’s first line of protection against Counterfeit products.
- Shelf-life limitations: expired or near expiry date products sold at very low prices, usually by unscrupulous middlemen.
- Deterioration due to temperature extremes during transit.
- Substandard products due to poor manufacturing processes.
- Mix-ups in warehouses or health facilities due to unclear labeling.
Methods for Development of Product Specifications

Koppelmann (1998) argued that, It can be challenging for some procurement units to determine how to develop or obtain appropriate specifications and/or to decide who should prepare them. Considering the depth of knowledge and specialized information required for writing effective, unambiguous procurement specifications, it is a job best done by a person with specific technical expertise. Program staff is aware of their requirements from the standpoint of using a product, but they may not be familiar with the scientific terms and product and performance characteristics needed to accurately describe it.

The role of procurement staff in specification development involves gathering information, facilitating communication between technical personnel and end users, consulting with technical experts, and placing the completed specification in the bidding documents and Requests for Quotation that are released to suppliers. Writing the actual specifications is not a job for procurement officers.

Format and Content

According to Lewis et al. (2009), failure to develop accurate specifications can result in the procurement of unsuitable products. A set of precise and clear specifications is a prerequisite for bidders to respond realistically and competitively to the requirements of the purchaser. The specification format should be comprehensive so that all important product features and requirements are addressed. The specification content should be clear and accurate to ensure the required product obtained is of good quality. He further elaborates in details on format and contents as follows;

1. Format

Potential suppliers are required to comply in full with all stated product specifications. To avoid confusion or misunderstanding, specifications should be presented in a manner that clearly categorizes and delineates all requirements.
2. Content

Content of technical specifications can be divided into three broad categories; product information, provisions, and packaging requirements. Specific details to be addressed within each category will differ for each commodity; however, the following can be used as a general outline.

i) Product Information

- Generic name or international nonproprietary name.
- Presentation, strength, and quantity in each container.
- Color and size.
- Regulatory requirements:
  - Certificate of licensing.
  - Quality certification of all raw materials.
  - WHO prequalification (if required).
- Lots per order.
- Shelf life.


- Documentation: all documents, such as manufacturing records and Certificate of Analysis, to be provided by the manufacturer.
- Inspection by the purchaser: the rights and timing for inspection of goods, if requested by the purchaser.
- Sampling procedures: the steps of the product sampling procedure, if requested by the purchaser.
- Sample retention: the manufacturer’s requirements to retain samples from manufacturing lots.

iii). Packaging and Shipping Requirements

Primary container: requirements of the primary container specific to the commodity.
Labeling: all information to be included on the product label, including but not limited to:
- Product/brand name.
• Lot/batch number.
• Expiration date (month and year).
• Date of manufacture.
• Manufacturer’s name and address.
• Contents and quantity, including tablet formulation (amounts of active ingredients per tablet).
• Drug registration number (if applicable).
• Brand or company logo.
• Country of origin.
• Product information sheets: language, quantity, and placement of product information sheets for consumers and physicians.
• Inner boxes: packaging material, size, and quantity of inner boxes.
• Exterior shipping cartons: type and strength of cartons necessary to protect commodities during shipment.
• Markings: markings and information required on inner and outer cartons.

There are three basic approaches to the development of a specification as outlined below.

• Input or process specifications
This specification is process based and is usually used when procuring services where certain processes need to be adopted. For example if a contracting authority requires a “back to employment” training programme for 16-23 year olds, although the training content may not be prescribed, the specification may state that training should be delivered in such a way that is accessible to people with disabilities. Alternatively, if a contracting authority requires a management development and training programme for senior officers it may specify the type of training to be delivered such as case studies, role play and so on.

• Output or performance specifications
It is normal practice to use output specifications where you believe the sector can offer a innovation, creativity, additional value added services within the bid or the client is not clear what is available within the market place, examples include ICT
systems, advertising campaigns and so on. An example might include the requirement for a contracting authority to have a network security system designed and implemented where the specification leaves it open for the bidder to suggest how this will be achieved. With the construction of works output specifications are normal practice when the client wants an integrated approach to the delivery of a project e.g. design, build, and operate solution. Under these circumstances it would be undesirable to limit the innovation of potential suppliers’ solutions to a detailed specification.

- Technical design specifications
   The use of technical specifications is limited to markets where there is a very precise business need or statutory requirement, for example, the maintenance of specialist equipment in buildings such as lifts, heating, air conditions etc. It is essential under these types of contracts that suppliers are clear on their legal and statutory requirements. (Lewis et al. 2009).

The following tables outline the Advantages and Disadvantages of different methodologies that need to be considered by contracting authorities

### Table 2.1 Advantages and disadvantages of input specification

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Suppliers are clear on the inputs required by the contracting authority</td>
<td>- The specification documentation generally requires more effort to produce</td>
</tr>
<tr>
<td>- The contracting authority is able to determine the processes used in the delivery of the contract</td>
<td>- Suppliers have less opportunity to show innovation in their approach to the contract</td>
</tr>
<tr>
<td>- The contracting authority can specify inputs that can more easily be monitored.</td>
<td>- The inputs set out in the specification need to be well researched to ensure they are the most economically advantageous option to reach the objectives of the contract</td>
</tr>
<tr>
<td>- Contracting authority has more control over the processes used to achieve the outputs</td>
<td></td>
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</tbody>
</table>

Table 2.2 Advantages and disadvantages of output specifications

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Suppliers have greater opportunity for innovation, as they are free to offer solutions that in their view best meets the specification;</td>
<td>• Generally requires a more proactive approach to monitoring</td>
</tr>
<tr>
<td>• The specification documentation requires less effort to produce;</td>
<td>• May make evaluation more difficult as one may end up comparing “apples” and “oranges” with a wide variety of prices. In these circumstances, contracting authorities will require more complex evaluation criteria.</td>
</tr>
<tr>
<td>• There is more opportunity to pass risk onto the supplier, as they have responsibility for the way the specification is met;</td>
<td>• May not be happy with the process used to achieve the outputs (this can be alleviated by adding the most important processes into the specification)</td>
</tr>
<tr>
<td>• The contracting authority can specify outputs that can easily be monitored.</td>
<td></td>
</tr>
</tbody>
</table>


Table 2.3 Advantages and disadvantages of Technical Specifications

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• With prescriptive specifications there is little scope for misunderstanding.</td>
<td>• Technical specifications may take longer to prepare</td>
</tr>
<tr>
<td>• Evaluation should be more straightforward as price can be a greater deciding factor.</td>
<td>• Discourages innovation.</td>
</tr>
<tr>
<td>• Emphasizes critical requirements</td>
<td>• Puts more risk on the contracting authority. If specification is incorrect contracting authority will have to pay for variations</td>
</tr>
</tbody>
</table>
<pre><code>                                                                               | • Greater chance of over-specifying and therefore increasing the price unnecessarily. |
</code></pre>


2.8 Categories of Specifications

Purchases description or specification is divided into main categories namely detailed specification and general or other purchase specifications (Dobler, 1996).
2.8.1 **Detail specifications**

This is the specification that specifies design requirements, such as materials to be used, how a requirement is to be achieved, or how an item is to be fabricated or constructed. A specification that contains both performance and detail requirements is still considered a detail specification. (Calvin, 1993).

2.8.2 **General or other purchase specifications**

Unlike detailed specifications, general specifications attempts to provide the seller with the general description of the goods to be supplied or services to be rendered. This kind of specifications intends not to go deep into underlying the requirements of the procuring entity to the supplier. (Gupta and Jackson, 1993).

For instance in manufacturing industry, when specifications provided are fixed, this will result into having final design of the product to be manufactured and fixed. If it happens the products’ final design is fixed then it is likely the product's competitive stance will also be stance which will result its profits to be also fixed. (Cambridge, 2005).

Developing proper specification is an important management tasks which is difficult because it involves many variables including the problem of conflicting human sensitivities and orientations. Many studies have revealed that many user departments of procuring entities are capable of making designs but producing the appropriate specifications becomes a conflicting endeavor. The major conflicting views and ideas if not views should be reconciled first hence to enable preparing appropriate specifications which will not lead the procuring entities from wasting time and costs. (David and David, 2008)

2.8.3 **Use and importance of specifications:**

In engineering, manufacturing and business, it is vital for suppliers, purchasers, and users of materials, products, or services to understand and agree upon all requirements. A specification is a type of a standard which is often referenced by a contract or procurement document. It provides the necessary details about the
specific requirements. (Pysdek, 2003). Specifications may be written by government agencies, standard organizations, trade associations, corporations and others.

A product specification does not necessarily prove the product to be correct. Just because an item is stamped with a specification number does not by itself indicate that the item is fit for any particular use.

The people who use the item (engineers, trade unions, etc.) or specify the item (building codes, government, industry, etc.) have the responsibility to consider the available specifications, specify the correct one, enforce compliance, and use the item correctly. Validation of suitability is necessary (Pysdek, 2003).

Actually the basic importance of specifications lies upon the fact that it intends at reducing the operating costs for the procuring entity. The cost of materials alone clearly dictates the significance of ensuring that the acquisitions of the materials observes the entire descriptions or provided specifications. This means the costs of many materials firms are engineered into product’s specifications during the designing stage. This is the point whereby the costs of the expected supplies can be reduced before making any orders. If the costs can’t be reduced at this stage possibly they will be built into the product permanently and will be hidden permanently into the firm’s cost accounting records.

2.8.4 Content of a Specification
A specification might include:

- Descriptive title and scope of the specification
- Date of last effective revision and revision designation
- Person, office or agency responsible for questions on the specification, updates, and deviations.
- The significance or importance of the specification and its intended use.
- Terminology and definitions to clarify the meanings of the specification
- Test methods for measuring all specified characteristics
- Material requirements: physical, mechanical, electrical, chemical, etc. Targets and tolerances.
- Performance requirements. Targets and tolerances.
- Workmanship
- Certifications required.
- Safety considerations and requirements
- Environmental considerations and requirements
- Quality requirements, Sampling (statistics), inspections, acceptance criteria
- Person, office, or agency responsible enforcement of the specification.
- Completion and delivery.
- Provisions for rejection, re-inspection, rehearing, corrective measures. The recommended contents of a specification is a good point of reference. It states that the contents of specifications should be as follows:
  - Title of specification
  - List of contents
  - Foreword, including why the specification has been written, and who the authority is;
  - The scope of specification
  - The purpose for the equipment/material/ supplies
  - Terminologies used, symbols
  - Conditions for storage
  - Texture and finish
  - Safety indications (Godfrey, 1999).

From the above list, the importance of the normal specification becomes clear, as well as the importance of ensuring that it is properly defined and not ambiguously written.

### 2.8.5 Specifications of Different Procurements

In discussing the various types of design specifications, (Donald et al, 2002) argued that the most detailed methods of describing requirements or specifications are the detailed specifications of the materials, parts and components to be used in making a product. This type of description actually tends to inform or tell the seller or supplier exactly what a buyer or procuring entity is willing or want to purchase.
2.8.6 Specifications of Procurement of Goods

Generally, the technical specifications for procurement of goods contain the following elements and description.

- Listing of goods to be procured including the required performance characteristics, quantity, delivery time together with incidental services
- Required availability of spare parts and services during life of goods
- Descriptive literature or samples to be provided with the bid;
- Description of any required performance or quality guarantee;
- Inspection and quality testing to be conducted, including pre-shipment testing and inspections.
- Environmental impact and safety standards to be met by the goods.
- Criteria and performance test or inspections for final (Barry, 1996)

2.8.7 Specifications for Procurement of Works

Specifications for procurement of works contain the following elements and descriptions of the requirements

General description of the scope and the purpose of the work to be done

- Precise description of scope of work to be carried out, i.e. elements such as designs, works, any manufacturing, installations of equipment.
- Physical nature and condition of the working site.
- Detailed listings of any equipment and components to be supplied.
- Detailed design and drawings of the work to be performed, to the extent those are to be supplied by the procuring organization under the contracting arrangements in question.
- Environmental impact and safety standards to be met.
- Description and testing to be conducted as various stages of works.
- Completion test.
- Technical documentations, drawings, operating manuals to be provided by contractors.
- Type and quantity of training and supervision to be provided by contractors.
- Inspections and performance tests to be passed for acceptance.
- Schedule for starting and completion of works time (Calvin, 1993)
2.8.8 Specifications for Procurement of Services other than Consultancy Services

There are several technical specifications that can be used in procurement of services other than consultancy services. The specifications will include among other elements and descriptions the following requirements:

- General description of the scope and purpose of the service
- Description of the service to be supplied and the tasks to be performed by the supplier, as much as possible as performance requirements
- Conditions under which the service is to be performed
- Descriptive literature or sample to be provided with the bid
- Inspection and quality testing to be conducted
- Criteria and methods by which the procuring entity intends to judge the performance services
- Description of performance and quality guarantee required
- Type and quantity of training and supervision to be provided by supplier
- Terms of reference. (Jackson and Ashton 1993)

2.8.9 Specification

The problem of specifying requirements is a particularly complex one in the international context, since the foreign suppliers tends to be more difficult to communicate with due to language, cultural and many other differences. In addition he may not be familiar with the local customs and practices which form part of specifications. This could lead the supplier to deliver goods or supplies which are in principal inferior or poor.

In specifying its requirements, an organization needs to use an approach, which is unambiguous, easily understood, easily transmitted, and as compact as possible so as to be able to receive the specified goods or services. Sincerely this is not easily achieved, and problems arising from the seller misinterpreting the buyer’s requirements are far from uncommon. It is no more than sound commercial sense for the buyer to spend sufficient time, effort and money on specifications, to ensure that they cannot be understood.
In international dealing it requires time devotions in preparing the specifications. (Waty 2000) adds that the consequences of not spending sufficient time and effort putting together proper specifications can be costly as well as time consuming.

Approaches that can be used in specifications are many but the common ones are as follows: (Mrope et al, 2000)

- Brand name
- End use
- Physical description
- Drawing
- Sample
- Catalogue or code number
- Against ‘standard’ national standards, such as BSI, TBS, international standards, such as ISO; standards of particular companies, such as those of IBM,
- Methods of manufacture

In order to obtain the right quality of materials from abroad, specifications should be carefully drafted and samples requested or sent for appraisal to ascertain suitability for the purpose. Specifications become more crucial when high value goods or services are to be purchased. Sometime it may require visits to the overseas supplier to ensure that specifications are going to be observed as well as strengthening the controls upon the goods to be delivered. This exercise will also be accompanied with demands for quality assurance from overseas suppliers.

2.9 Principles to apply writing a specification/sustainability criteria
The specification is an important step in the procurement process and is a key factor in ensuring best value for money and the most sustainable outcome. Simply, a specification is a description of the product or service required, reflecting your sustainability demands. The quality of the specification determines the quality of the resulting supplier work. It is important to resist the temptation to just take the specification that was used last time and issue that, if you do this you are running a high risk of failure. The specification may not reflect today’s approach to this
product or service or indeed your new requirements. Also you must not just take the
specification of the specific product you like and copy that out, competitor suppliers
will see through this quickly. When writing the specification and the sustainability
criteria within it, consider:

- The risk assessment you have undertaken
- Identify what are your key success factors for this contract
- Consult the previous specification (if available)
- Enquire with a range of suppliers and obtain their fact sheets/ approach
- See if another colleague or organization has done something similar

Use all the above as a base to work from, do not reinvent the wheel, but equally don’t
take the quick option that may result in failure. Think carefully about what is really
important to you and would cause problems if it went wrong. Taking all this into
account start to write the specification.

Fair trade is an organized social movement which promotes standards for
international labor, environmentalism, and social policy in areas related to
production of Fair trade labeled and unlabeled goods. The movement focuses in
particular on exports from developing countries to developed countries. Fair trade's
strategic intent is to deliberately work with marginalized producers and workers in
order to help them move from a position of vulnerability to security and economic
self-sufficiency. It also aims at empowering them to become stakeholders in their
own organizations and actively play a wider role in the global arena to achieve
greater equity in international trade.

2.10 Different types of specification, encouraging innovation

There is no right or wrong choice in the type of specification to use, it depends on the
risks identified, the maturity of the supply market and the degree of innovation you
require from suppliers. The three different types of specification are detailed below:

2.10.1 Technical Specifications

If you know everything there is to know about the work or product required, write a
detailed specification describing the requirement. You are the expert; you tell the
supplier exactly what is required. The risk here is if you get it wrong there’s no redress with the supplier unless they have failed to meet your specification. The positive side is that you know exactly what you are getting. You must however, be aware that there is often little motivation for supplier innovation in technical specifications.

2.10.2 Functional specification
If you know what you want to achieve, but are uncertain of the steps by which you can achieve it, you should write down all you know about the problem, describe the outcome needed and invite suppliers to propose solutions. This essentially makes use of the suppliers’ expertise in their field. They are the experts; let them tell you what is required. There is often great scope for variation in this approach, but it does encourage supplier innovation. You however have to think very carefully about how you will evaluate the bids received. You are likely to receive a wide variance so you must have a structured method of determining which is the most appropriate.

2.10.3 Performance specification
If you know what the performance requirements are, you then define the performance parameters and little else. In this approach you are using the suppliers expertise, inviting them to submit a solution to the problem. For example, if a desired outcome is control room temperature between 19 and 24 degrees Celsius, within tolerances of +/- 1 degree, suppliers may suggest an air conditioning system or fresh air pipes and ventilation. There is great scope for variation in this approach, but it really encourages supplier innovation. You must however think very carefully about how you will evaluate the bids received. You are likely to receive a wide variance so you must have a structured method of determining which is the most appropriate.

2.10.4 Setting the specification scope
Think very carefully about the scope of the specification, what is your requirement now and into the future? Take at least a 5 year view. Is this something you will only buy once and will never need again? or is it something that needs a long term commitment from the supplier? or is it a continual need?. In particular consider if you need to include:
• Flexibility for future purchases of the same item/service
• Maintenance
• Spares
• Training on how to use the product, both now and in the future
• Licensing
• Upgrades
• Take back at disposal stage

2.10.5 What specifications should and shouldn’t do

Specifications should:
• Address the sustainability risks you have identified in risk assessment
• Identify key deliverables
• Clearly state your real requirements
• Think about the future needs, is more of the same required soon, maintenance etc
• Use plain and simple language
• Ensure technical accuracy
• Contain clear time-scales/programme
• Set performance criteria
• Use appropriate international standards where they exist
• Reflect whole-life costs
• Try to encourage bids from SME organizations
• Support the diversity/equal opportunities agenda
• Include health and safety considerations
• Provide flexibility for subsequent requirements

Specifications must not:
• Exclude areas of risk that are best addressed in the specification
• Use trade names
• Use Brands e.g. Land rover, Compaq etc
• Exclude any site implications
• Breach copyright
• Use needless acronyms
• Discriminate on the basis of nation state/region e.g. French companies only
• Be ambiguous
• Be biased towards any particular supplier
• Exclude relevant sustainability criteria

2.10.6 Minimum sustainability criteria in specifications
When determining sustainability criteria for a specification, a useful approach can be to set minimum standards in the specification. Minimum standards are usually influenced by both market availability as well as the sustainability level below which you would not consider buying the good (product) or service. This approach will typically allow more suppliers to bid, as the criteria will be more easily addressed. Procurers are advised to investigate whether such criteria exist in their country and apply them as a minimum standard accordingly. It must be recognized that by setting minimum sustainability criteria that you are signaling to suppliers that you will not award the contract to a supplier that does not meet this criteria. Therefore, you must ensure that the minimum criteria are attainable.

2.11 Empirical Literature Review.
Many reforms have been underway in the procurement profession since 2001 where the Public Procurement Act No 3 of 2001 was enacted by the Parliament of United Republic of Tanzania. The act existed for only three years and in 2004 was repealed and the new act (PPA, 2004) was passed by the parliament of URT. Section 5 of PPA 2004 brought into existence PPRA.

PPRA as the regulatory authority for procurement and supplies practices in Tanzania has been issuing guidance in ensuring public procuring entities at least they achieve value for money procurement through procuring supplies or materials as per stipulated specifications.

PPRA has consistently emphasized on the adequacy of technical specifications in procurement of works, services and even goods. It has stressed that the procuring entities especially the public ones would avoid unnecessary costs if will always stick
of appropriately prepared specifications. It has also emphasized on the need for the PMU be staffed with appropriate members so as to avoid poor specifications as well as poor execution of procurement functions.

The authority has issued standard tendering document of which among other matters it discusses the need to adhere to the specification requirements.

2.11.1 The preparation of Technical Specification

Notes for (PPRA, 2005), A set of precise and clear specifications is a prerequisite for Tenderers to respond realistically and competitively to the requirements of the Purchaser without qualifying their Tenders. In the context of International Competitive Tendering (ICB), the specifications must be drafted to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of economy, efficiency, and fairness in procurement be realized, responsiveness of Tenders be ensured, and the subsequent task of Tender evaluation facilitated. The specifications should require that all goods and materials to be incorporated in the goods be new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided for otherwise in the contract.

Samples of specifications from previous similar procurements in the same country are useful in this respect. The use of metric units is encouraged by the Bank. Depending on the complexity of the goods and the repetitiveness of the type of procurement, it may be advantageous to standardize the General Technical Specifications and incorporate them in a separate subsection. The General Technical Specifications should cover all classes of workmanship, materials, and equipment commonly involved in manufacturing similar goods, although not necessarily to be used in a particular procurement. Deletions or addenda should then adapt the General Technical Specifications to the particular procurement.

Care must be taken in drafting specifications to ensure that they are not restrictive. In the specification of standards for equipment, materials, and workmanship,
recognized international standards should be used as much as possible. Where other particular standards are used, whether national standards of the Borrower’s country or other standards, the specifications should state that equipment, materials, and workmanship that meet other authoritative standards, and which ensure at least a substantially equal quality than the standards mentioned, will also be acceptable.

The following clause may be inserted in the Special Conditions of Contract or the Technical Specifications.

**Sample Clause: Equivalency of Standards and Codes**

Wherever reference is made in the Technical Specifications to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest current edition or revision of the relevant shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or relate to a particular country or region, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be acceptable.

Reference to brand name and catalogue number should be avoided as far as possible; where unavoidable they should always be followed by the words “or at least equivalent.”

Where appropriate, drawings, including site plans as required, may be furnished by the Purchaser with the Tendering documents. Similarly, the Supplier may be requested to provide drawings or samples either with its Tender or for prior review by the Purchaser during contract execution.

In addition, the PEs is required to plan their forthcoming annual procurement and must publish its Annual Procurement Plan (APP) to draw businesses early attention to potential procurement opportunities. The APP is to contain a short strategic procurement outlook for the PE by details of any planned procurement. The detail should include the subject matter of any planned procurement and the estimated date of the publication of the request for tender so as to have well-functioning public system (Government of Tanzania guideline, 1997)
2.11.2 Other Related Studies

There have been several initiatives to ensure that public entities achieve value for their monies. The emphasis has been always to ensure that inputs deployed and conforms to the outputs to be generated. To achieve this goal the emphases have been to ensure that procurement is supported with adequate specifications. But there are some cases where specifications are not given importance though are vital for the sake of being committed to certain economic integration or cooperation.

In Australia for example if one is to prepare tender documents where Australia – United States Free Trade Agreement (AUSFTA) applies, has to keep in mind that technical specification or any other prescription does not unnecessarily create obstacles to trade between Australia and USA. Otherwise the specifications should be basing on the international standards where they exists, unless their use would in one way or another impose greater burdens than use of Australian local standards. Actually the nature, content and structure of specifications will depend on the nature and complexity of the requirement.

Baring this in mind, most of requirements has been simple, straightforward and easily defined in terms of function and performance. In these cases or circumstances, a detailed specification would be impartial and not cost effective.

The American Society for Testing Materials (ASTM) traces the nature of standard specifications from the early days justifying that buyer and suppliers need to work together in order to have clear understanding of specifications. The ASTM adds that manufacturers are issued with detailed description of materials to ensure that their supplies meet certain quality standards. For example when federal arsenal ordered gun steel from steel mill, the contract includes several pages of specifications detailing chemical composition and physical characteristics. The federal government also asked the steel makers to take a sample from each steel batch which was then subjected to a few simple tests determining its tensile strength and elasticity. To perform quality checks, American steel companies used new testing equipment such as the Riehle Steel Tester or a version of Tinius Olsen2s Little Giant, which were used to determine tensile strength. (ASTM, 2005).
2.11.3 Related Literature Frameworks

Effective procurement planning provides important bases organization to effect efficiency procurement proceedings that could in one way or another enables the firms to achieve competitive advantage. Efficiency procurement proceedings call for having a detailed statement which will provide description of characteristics or the basic requirements for materials, supplies, equipment or services. This demands specifications be prepared properly so as to enhance value for money procurement. (Erridge et-all on Best practices of procurement, (Aldershot, 2001).

PPRA which is the authority vested power to regulate the functioning or practices of procurement emphasized this aspect of preparing specifications that facilitates achieving economy, efficiency and effectiveness of the public money used in both development and recurrent expenditures.

Specifications should cover all classes of workmanship, materials, and equipment commonly involved in manufacturing similar goods, although not necessarily to be used in a particular procurement. (The Tanzania Public procurement Act, 2004)
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Overview
In this study, the researcher intended to collect data concerning specifications preparations at Ocean Road Cancer Institute. The intention was to gather data related to Specification in the procurement process in the Board and problems related to the less reliance in the specification in the procurement process policy in place. The chapter includes research design, area of study, population under study, sampling techniques, data processing, data analysis and expected results which.

3.2 Research Design
In this study, the case study design was applied. This approach was used to collect data regarding specifications at ORCI

The advantages of this approach are: This approach has got its advantages as follows;

- It helped the researcher to make an in-depth investigation of the issues under study

- It helped the researcher to make intensive observation of the transactions relating to the problem.

- Thus, the case study method was appropriate to use for this type of study.

3.3 Area of study
This study was conducted at Ocean Road Cancer Institute.

3.4 Population of the study
The targeted populations were Heads of departments, Procurement Management Unit and evaluation committee, Member of tender board and accounting officer at ORCI. A total of 21 respondents were involved in this study as a population.
3.5 **Sampling procedures and sample size**

3.5.1 **Sampling procedures**

In this study, both purposive and random sampling procedures were used. Purposive sampling was used to select research respondents from top executives of ORCI i.e. Head of Departments, heads of sections and any other user department.

3.5.2 **Sample size**

The sample size of this study involve officials, because of their positions as decision and policy makers that affect day-to-day operations of the institute in connection to procurement proceedings particularly consequences they are facing as a result of poor specifications. Apart from officials, other respondents were; 10 heads of departments, 5 members of evaluation committee, 5 members of tender board, and 1 accounting officer.

3.6 **Data collection methods**

In this study, both primary and secondary source of data were used. Qualitative inquiry was used to explore causes of poor specification. This was prior to quantitative methods to get heads of departments perceptions on the subject. Quantitative methods were employed to capture important figures and uniform response in ensuring focused findings. Thus a structured questionnaires were administered to respondents so as to find the causes of poor specification issues within Ocean Road cancer Institute.

3.6.1 **Primary data**

This type of data was collected through the guiding interview and Questionnaire. Open-ended questions were prepared and administered to the selected research respondents.

3.6.1.1 **Interview**

The main objective of interview is to seek and describe the meaning of central themes in the life world of the subjects. The main task in interviewing is to understand the meaning of what the interviewees’ say. For the case of this study, interview was conducted to the heads of the departments and members of PMU and
specifically; senior officials and the support staff. In interview, information was obtained through inquiry and recorded by the numerator. Structured interviews were performed by using survey forms, whereas open interviews were conducted direct to respondents. The notes were subsequently structured (interpreted) for further analysis.

As in preparing a questionnaire, it is important to pilot test forms designed for the interviews. The best attempt to clarify and focus by the designer cannot anticipate all possible respondent interpretations. A small-scale test prior to actual use for data collection will assure better data and avoid wasting time and money and inform the suitability of the data collection tools. (McNamara.1999)

Although structured interviews can be used to obtain almost any information, as with questionnaires, information is based on personal opinion. The below advantages of the interview technique made a researcher decides to use interviews so as to allow the researcher to probe in details about the topic and explain tough terms which were used in the study. An interview provides higher response rate. (Trochim 2002)

**Advantages of using an Interview**

- If the respondent lacks reading skills to answer a questionnaire, interviews assist to capture information.
- Interviews are useful for untangling complex topics.
- The Interviewer can probe deeper into a response given by an interviewee.
- Interviews produce a higher response rate.

**Disadvantages of using an Interview**

- The interviewer can affect the data if he/she is not consistent with the information she is providing.
- It is very time consuming.
- It is not used for a large number of people.
- The Interviewer may be biased and ask closed questions.
3.6.1.2 Questionnaire

Questionnaires is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information or obtain statistically useful information about a given topic from respondents or individuals. They are a valuable methods of collecting a wide range of information from a large number of individuals, often referred to as respondents. Adequate questionnaire construction is critical to the success of a particular study. Inappropriate questions, incorrect ordering of questions, incorrect scaling, or bad questionnaire format can make the study valueless, as it may not accurately reflect the views and opinions of the participants. A useful method for checking a questionnaire and making sure it is accurately capturing the intended information is to pretest among a smaller subset of target respondents. Questionnaires may be used to collect regular or infrequent routine data, and data for specialized studies. Some of the data often obtained through questionnaires include demographic characteristics, procurement practices, opinions of stakeholders and workers of a given company or organization on financial, specification issues or management, general information and household related issues. (Timothy, 2005)

A questionnaire requires respondents to fill out the form themselves, and so requires a high level of literacy. Where multiple languages are common, questionnaires should be prepared using the major languages of the target group. Special care needs to be taken in these cases to ensure accurate translations.

In order to maximize return rates, questionnaires should be designed to be as simple and clear as possible, with targeted sections and questions. Most importantly, questionnaires should also be as short as possible. If the questionnaire is being given to a sample population, then it may be preferable to prepare several smaller, more targeted questionnaires, each provided to a sub-sample. If the questionnaire is used for a complete enumeration, then special care needs to be taken to avoid overburdening the respondent. If, for instance, several agencies require the same data, attempts should be made to co-ordinate its collection to avoid duplication. (Merriam, 2008)
Questionnaires, like interviews, can contain either structured questions with blanks to be filled in, multiple choice questions, or they can contain open-ended questions where the respondent is encouraged to reply at length and choose their own focus to some extent. To facilitate filling out forms and data entry in a structured format, the form should ideally be machine-readable, or at least laid out with data fields clearly identifiable and responses pre-coded. In general, writing should be reduced to a minimum (e.g. tick boxes, multiple choices), preferably being limited to numerals. In an open-ended format, keywords and other structuring procedures should be imposed later to facilitate database entry and analysis, if necessary. (Gillham, 2008).

**Advantages**

The main advantage of using questionnaires is that a large number of people can be reached relatively easily and economically. A standard questionnaire provides quantifiable answers for a research topic. These answers are relatively easy to analyze. This is a reason why the researcher chose to use this technique as the data collecting method.

**Disadvantages**

Questionnaires are not always the best way to gather information. For example, if there is little previous information on a problem, a questionnaire may only provide limited additional insight. On one hand, the investigators may not have asked the right questions which allow new insight in the research topic. On the other hand, questions often only allow a limited choice of responses. If the right response is not among the choice of answers, the investigators will obtain little or no valid information.

Another setback of questionnaires is the varying responses to questions. Respondents sometimes misunderstand or misinterpret questions. If this is the case, it will be very hard to correct these mistakes and collect missing data in a second round.

**3.7 Secondary data**

Secondary data was collected from different documents at ORCI. More specifically documents related to procurement of various supplies, materials, equipment and
services were reviewed. Those data emanated from ORCI procurement manuals, procurement plan, bidding documents to various past tenders, financial reports – monthly, financial regulations, internal auditors’ manual, auditor's reports and any other relevant reports related to ORCI.

The researcher obtained secondary data by means of reviewing office records, documents, and literature reviews, publications obtained from respective offices, libraries, internet and previous conducted researches, Auditors report and internet. The information gathered from documentary added value to what was collected from the interviews and questionnaires. Documentary also validates the reality of collected information. Documents provided more information and the previous/current practices concerning specifications at ORCI.

Such an approach is useful in doing research since it is usually readily available. The information to be used in documentary research can be accessed by researchers by simply visiting the resource centers or just browsing the internet. (Hollowitz & Wilson 1993)

Further, doing this research is less expensive as compared to surveys and ethnography. For surveys one has to do a pilot study, and then do actual field data collection incurring traveling expenses. The only costs involved in documentary research was office and various expenses. The other advantage is that some information obtained by secondary sources. For example information on ancient histories which cannot be found by interview surveys or archaeological data that has been documented but the sites have changed can only be obtained from libraries or museum. (Relix, 2002)

3.8 Data processing and analysis

Content Analysis

Content analysis is a summarizing, quantitative analysis of messages that relies on the scientific method (including attention to objectivity, inter-subjectivity, a priori design, reliability, validity, generalizability, reliability, and hypothesis testing) and is
not limited as to the types of variables that may be measured or the context in which
the messages are created or presented (Ole 1969).

(Kothari, 2004) argued, content analysis consist of analyzing the contents of
documentary materials such as the books, magazines, newspapers and the contents of
all other verbal materials which can be either spoken or printed. Content analysis
since 1950’s is mostly qualitative analysis concerning the general import or message
of the existing documents just like the casual interview and depth interviewing.

Since the nature of the study ends at gathering quantitative and qualitative data, in
processing the collected data both quantitative and qualitative processing and
analysis was used

Complimentarily of the two data, collection methods i.e. participatory and
quantitative were the paramount to get quality data and closer to reality findings.

Generalization of qualitative data, drawing of case studies and quotes provided
crucial base of analysis of qualitative data. For quantitative information collected,
computer-based statistical package (SPSS) was used to get important descriptive
data, tables, frequencies etc. All these allowed efficient discussion and presentation
of the research findings. The quantitative aspect supported by qualitative analysis
and presentation of the opinions and views raised by research respondents. (Kothari,
2004)

3.10 Ethical Consideration

This study was guided by the sound ethical principles of social science research.
Basically, social science research observes key ethical principles as follows: the
researcher should ensure that there is no physical and emotional harm to the
respondents; the researcher should take into consideration issues on privacy;
anonymity and confidentiality; voluntary participation; honesty as well as approval
for access to an institution or organization. More details follow below:
Approval for access to Organization

A researcher submitted three copies of the proposal documents to the Faculty and provided with an official letter of introduction for data collection. The researcher submitted the letter at the ORCI Department of HRM so as to get formal permission to acquire information and conducting a research. The Department issued the permit with the list of departments requested by the researcher for data collection.

Consent

A researcher did not use force during the whole process of data collection. All the respondents participated voluntarily. For the key informants, the researcher explained to them the key objectives of the study and thus they were willing to provide the information which was required by the researcher.

Confidentiality and Anonymity

The researcher affirmed to the respondents at the outset that, this study was conducted for academic purpose only and not otherwise. The researcher assured all the respondents that the rule of confidentiality will be observed seriously considering the fact that the government information is not supposed to be exposed.

Risk and Harm

This study did not involve physical movement of any participant, as mentioned earlier; all the interviews were conducted at the work place of the respondents. As a whole, the study was conducted voluntarily thus no any harm and risks were involved throughout the whole research.
CHAPTER FOUR
RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction
This chapter centers its attention on analyzing and discussing the findings and interpretation of data. Quantitative data were analyzed using SPSS for demographic data (sex, age, experience) and Microsoft Excel Spreadsheet for the rest of information collected. All the same, statistics were derived and shown in frequencies and percentages.

In view of the fact that, numbers from quantitative information by themselves do not give adequate meaning, qualitative information based on description used to complement them. Direct quotations were used to prove what respondents have said about the matter being analyzed, thus supporting the statistical information.

For all intents and purposes, the presentation of analysis and discussion of field data is based on the research questions presented in the form of tables, pie charts and bar charts. It comprises explanation on the role of the specification in the procurement process in Ocean Road Cancer Institute.

4.2 Demographic Information of the Respondents
The individuality of respondents in this section is in terms of their sex, age, position and the experience at the working place. The percentages of uniqueness of each group of respondents were based on the total number of respondents. The researcher saw the essentiality of obtaining this information of respondents because such information has the impact on how the procurement process is conducted at ORCI.

4.2.1 Distributions of Respondents
The sample presented in table 4.1 below indicates the grand total number of respondents which was 21 summing up a total percent of 100%, ranging from different cadres.
Table 4.1 Distribution of Respondents

<table>
<thead>
<tr>
<th>Category of Response</th>
<th>Number (F)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head of department</td>
<td>10</td>
<td>47.6</td>
</tr>
<tr>
<td>Member of Evaluation Committee</td>
<td>5</td>
<td>23.8</td>
</tr>
<tr>
<td>Members of Tender Board</td>
<td>5</td>
<td>23.8</td>
</tr>
<tr>
<td>Accounting Officer</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Data 2013

The table above shows the different categories of respondents; researcher categorized these respondents purposely so as to gather the right information from the right people. Heads of the department were the one who planned and arranged the whole process of procurement. On the other hand, the members of the tender Board and the procurement unit involve direct in the procurement process while the accounting officer authorize the payments.

In this chapter, each heading reflects one of the questionnaire and interview guide questions, which basically were formed to incorporate the aim and objectives of the study. This study intended to examine the role of specification in procurement process as well as to determine how specification for various tenders are being prepared by the agency and to investigate the relationship between procurement qualifications and adherence to specification in tendering process.

4.2.2 Sex of the Respondents

As previously indicated, the total number of all respondents were 21, whom included head of departments 10(47.6%), 5(23.8%) members of evaluation committee and 5(23.8%) members of Tender Board while 1(4.8%) accounting officer. Of all the respondents 15(71.4%) were male and 6(28.6%) were female as it is shown in table 4.2 below. This implies that the issue of gender balance is considered at ORCI thus the researcher was able to balance response.

Table 4.2 Sex of the Respondents

<table>
<thead>
<tr>
<th>Category of Response</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>15</td>
<td>71.4</td>
</tr>
<tr>
<td>Female</td>
<td>6</td>
<td>28.6</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Data 2013
4.2.3 Distribution of Respondents by Age Group

The researcher was keen to find out as to whether age has an impact on preparing the specification in the procurement process. She wanted to know how different groups of different age support and facilitate the use of specification. Does age associates with preparation of specification? Figure 4.1 below presents the distribution of the respondents belonging to different age groups as follows. The ages between 25 - 35 years were 3 (14.3%), the age groups 35 - 45 years were 15 (71.4%) respondents, and 45 - 60 years were 3 (14.3%) while 60 years and above were none of all the respondents.

**Figure 4.1 Distribution of Respondents by age group**

![Distribution of Respondents by age group](source.png)

**Source: Field Data 2013**

Additionally to understand well the distribution of respondents by age, the researcher was concerned on how this distribution could relate to the effective use of specification in the procurement process. Consequently, one of the respondents aged between 25 and 35 from procurement unit had the following comments:

*"We are very much concern when we involve on the procurement process as we follow all the proceedings and procedures as stipulated in the public procurement Act. We cannot avoid that".*

This gives an impression that public servants under this age are comfortable with the use of laws and regulation in the whole procurement process. On the contrary, to such response, the interviews conducted to some of respondents aged between 45 and
60 they had the following to say: “*Some time we use experience we have from our daily practices in the procurement process, we put aside laws...*”

In general, it was noted that, respondents of this age are working on the base of business as usual, they do not follow laws and orders in the procurement process especially in the aspect of specification.

For the researcher to know whether there is a direct link between working experience and the application of specification, the researcher gathered the information about working experience of the respondents at ORCI. Figure 4.2 below indicates that 5 (24%) of all the respondents worked with ORCI for the period less than 1 year, where 4 (19%) respondents worked for the period between 1 - 2 years, while 7 (33%) worked for period between 2 - 4 years and 5 (24%) worked for the period between 4 - 6, while none of the respondents worked for 6 years and above.

**Figure 4.2 The time of working with ORCI**

![Figure 4.2 The time of working with ORCI](image)

**Source:** Field Data 2013

The findings above implies that those who were recently employed for stance >1, 1-2, 2-4 years are seriously committed and they follow all the procurement procedures. On the other hand those who have 4-6 years of experience they are working under the bases of experience. This kind of variation indicates that most of the public
servants who work for a long time in an organization rely on experience and they are conservative and they have negative perception towards change.

4.3 Knowledge in preparing the Specifications document

Experience shows that, knowledge is the key of any success. Having realized that, researcher was interested to know if those respondents who are direct involve in the preparation of specifications during the procurement process have the real knowledge on preparing the specification document. 3(14%) of all respondents did not had the knowledge on preparing the specification document. On the other hand 18 (86%) they were collaborating with the user department on identifying the specifications of the items required; however they also consult the technical department of the items concerned. By so doing the user department acquire the right item of the required quality. The line chat 4.1 and table 4.3 below present the knowledge of respondents in preparing the specification document.

Table 4.3 The knowledge of respondents in preparing the specification document

<table>
<thead>
<tr>
<th>Category of response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>They have knowledge</td>
<td>18</td>
<td>86</td>
</tr>
<tr>
<td>The do not have Knowledge</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Data 2013

Figure 4.3 Knowledge of respondents in preparing the specification document

Source: Field Data 2013
From an interview with one respondent from one of the user department had the following remarks “I am a leader in preparing the technical specification for drugs, medical suppliers and laboratory equipments, the information that I am providing helps a lot the procurement unit to prepare the specification document”.

Another respondents from the procurement management unit commented that; “I always consult the user department and technical experts in preparing technical specification. Being a procurement experts I lead the team in arriving preparing specification which will enable procurement of the right and quality items”

The findings above indicate that the document of specification is prepared by the team and not only the task of the procurement unit alone. It is a group work and everyone has to play its role more effectively so as to get a required item and of the quality.

4.4 The impact of poor specification on the operation of the Institute

Researcher was eager to find out about the impact of the poor specification in the operation of the Institute. 10(48%) respondents pointed out that, poor specification cause loss of funds while 5(24%) argue on the purchases of poor quality and quantity of the item, 3 (14%) wastage of time and energy and 3(14%) it is very risk and may cause death. The Table 4.4 and the Figure 4.3 shows the impact of poor specification in the operation of the Institute.

**Table 4.4 The Impact of Poor Specification**

<table>
<thead>
<tr>
<th>Category of Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of Funds</td>
<td>10</td>
<td>48</td>
</tr>
<tr>
<td>Wastage of time and Energy</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>It is very risk</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Poor quality and quantity of Item</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Source:** Field Data 2013
The findings above necessitated the researcher to conduct an interview with respondents as follow; one respondent from procurement unit had the following comment; “poor specification cause loss of funds, because once you procure items with wrong specification then it will take back the whole process of identifying the correct specification which is very cost full, however you cannot return those item with the wrong specification hence loss”

In relation to the above comment, another respondent said; “the process of preparing specification document takes time, so once you find that you identified wrong specification for an item then you will have to start again the whole process which is the wastage of time and energy”.

Risks, it was another impact of poor specification as pointed by one respondent. “Poor specification has risk, example for if poor specification may happen in laboratory equipments, wrong equipment can provide the wrong results hence wrong prescription, this might even cause death, poor item will also perform poorly.

The remarks above show that, the process of preparing specification has to be performed with great care so as to avoid the loss that might occur due to poor specification.
4.5 Causative of the Poor specification

Because poor specifications cause a lot of challenges as pointed above, researcher wanted to identify the causative of poor specification in the Institute. The findings shows that, 10(48%) argued that poor specification is caused by lack of understanding of specification of an item by user department where 7(33%) said poor specification is caused by lack of expertise in the user department and 4(19%) argued on poor preparation of the specification document. The Table 4.5 and the Figure 4.4 depicts the causative of poor specification in the Institute.

Table 4.5 Causative of poor specification

<table>
<thead>
<tr>
<th>Category of Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of understanding of specification</td>
<td>10</td>
<td>48</td>
</tr>
<tr>
<td>Lack of Expertise</td>
<td>7</td>
<td>33</td>
</tr>
<tr>
<td>Poor preparation of Specification document</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field Data 2013

Figure 4.5 The causative of poor specification in the Institute

Source: Field Data 2013

The findings above compelled the researcher to hold an interview with one respondent from Procurement management unity who had the following remarks; “most of the time the user department fails to identify their needs, it is very difficult
for us to prepare the specification document if the user department fails to identify their needs because they are the one who knows better than us”

Additionally one respondent said “the biggest challenge that we are facing is lack of expertise in the user department, you may find that the user department fails completely to point out their specification of the item that they need this is due to the fact that they don’t have the expertise on the item concerned, the user department suppose to have the staff who have knowledge, that will smoothen the process of getting the exactly required item”

Contrary to the above comments, one respondent from user department said; “usually we prepare our needs as we want; the challenge is to those who are preparing the specification document does not have knowledge of preparing it and they don’t follow proper procedures that are required.

The comment above shows that, each actor who involves in the process of identifying and preparing specification document are suppose to have the knowledge required to make the process more successful.

4.6 Capacity Building

Human resources need to be developed by training them time to time so as to build their capacity and improve their daily practices. The findings show that 19(90.5%) of all respondents argued that the Institute do not provide training patterning to identification and preparation of specification document hence poor performance. On the other hand 2(9.5%) respondents agree that the Institute provides training patterning the identification and preparation of the specification document. The Table 4.6 and Figure 4.6 illustrate the trend of capacity building in the Institute.

<table>
<thead>
<tr>
<th>Category of response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Institute do not provide training</td>
<td>19</td>
<td>90.5</td>
</tr>
<tr>
<td>The Institute provide training</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source:** Field Data 2013
The finding above shows itself that the Institute does not emphasis on providing training to its staff. This is a very challenging situation because there are a lot of changes happening in the field and the way of doing things, thus the staff need to be updated with the new information so as to improve their practices.

4.7 Challenges on evaluating the bidding documents

One among the impact of poor specification is difficulty of evaluating the bidding document. 15(71.4%) respondents comment on the failure of bidders to comply with the required technical specifications while 6(28.6%) respondents pointed on the issue of failure to meet the required standards. The figure 4.7 Summaries the challenges on evaluating the bidding documents.
The findings show that, there is a need to be very careful on preparing the specification document because failure to do so might cause the wastage of time as well as financial resources as it is shown in the figure above.

4.8 Efforts taken by the Institute to rectify the situation

The Institute has put in place the Tender Board which passes through the whole specification document before sent to the bidders. That way it minimizes the chance of receiving wrong items. Not only that but the Institute also employs the qualified staff so as to avoid the inconveniences that might be caused due to lack of knowledge to employees.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1 Introduction
The chapter endows the summing up of the whole work. It gives a researcher’s scrutiny based on the findings acquired during the field. The digest the whole study so as to create enhanced thoughtful. In this chapter also, the researcher wind up by presenting the general overview by referring the observation done during the study. Additionally, the researcher recommends on key issues which she believes that, if they will be put into consideration they will bring about positive changes in the current situation and in the future.

5.2 Summary of Dissertation
The foundation of this study was to examine the role of specification in procurement process at Ocean Road Cancer Institute. The key objective was, to determine how specification for various tenders are being prepared by the agency, to investigate the relationship between procurement qualifications and adherence to specification in tendering process as well as to examine how poor specification affect ORCI service provision.

Chapter one is composed by different fraction, starting with an introduction where the researcher explained the general overview about the procurement process, statement of the problem which basically focused on specification in the procurement process. Thus the research questions were formulated with the intention of providing answers for statement of the problem as well as the objectives of the study. Another part was the significance of the study followed by definition of key terms.

In chapter two, the detailed information about procurement and specification was presented. Various relevant literatures were referred. Empirical and theoretical review was in the same chapter, the concept “specification” was deeply elaborated to create a clear understanding to a reader.

Chapter three indicated the research methodology employed on this research. The whole chapter showed how the whole research was conducted. The data collection
methods employed. As this study required detailed information to meet the research objectives, therefore the key instrument applied was an interview. This research was a case study which based at ORCI.

Chapter four is the analysis of the study; all the research questions derived from the statement of the problem and objective of the study were replied in this chapter. The chapter is constituted by sections which developed from the questionnaire and interview. Direct quotations from the respondents were presented as the interview was the key instrument. Basing on the discussion of the findings, researcher found that the process of developing the specification document involve many different actors. And the main challenge is lack of skills to the user department as well as lack of effective communication between the user department and the technical department as well as poor support from the top management. This challenge lead to poor development of the specification document hence wastage of time and financial resources, energy, it may also lead to the acquiring of the poor quality and the item of the poor standards. Thus a researcher insisted that, each actor has to perform their duties more effectively and efficiently so as to reach the intended objectives. The findings were presented in form of pie charts, tables, line chart, histogram and pyramid so as to make easy understanding.

5.3 General Conclusion
Basing on the discussion of the findings, researcher find that the process of developing the specification document involve many different actors. Each actor which includes the top management, the user departments, tender board, procurement management unit and the technical department has to perform their duties more effectively and efficiently. Failure of one actor might cause the failure of the whole process hence wastage of time and financial resources. However the Institute has a very key role to play on ensuring that, the Tender Board performs its duties with great care because they are the one who approve the specification document. As the findings shows, there is greater negative impact if the specification document will be poor. The poor document will cause wastage of financial resources and energy, it may lead to the acquiring of the poor quality and the item of the poor standards, it
waste time and it is too risks as it may cause death once the facility procured provides wrong results.

5.4 Recommendations

Enough time has to be vested on preparing the specification document. User department has to take time to identify their needs correctly. On the other hand the technical specification has to be identified by the expertise; the consultation has to be done to the right people.

As the knowledge is power; the Institute has to make sure it employs the people with the knowledge that is required by the Institute. However it has to provide training more often so as to keep its employees more updated with the changes that is happening time to time in the field.

Communication, there must be clear communication between those who are involving it the process of preparing the specification document and the whole process of procurement. Lack of proper communication between them might cost a lot the Institute.

Laws, rules and procedures are the key guidance thus they have to be observed more carefully. In the Laws everything has been stipulated and elaborated clearly. Those who are involved in the process of procurement have to understand those laws and abide to them. On this all the employees are suppose to be commit.
REFERENCES


PhD McNamara C, (1999) General Guidelines for Conducting Interviews [V.1], Minnesota


APPENDIX I: ORCI ORGANIZATION STRUCTURE

APPENDIX I: THE FUNCTIONS AND ORGANISATION STRUCTURE OF ORCI

BOARD OF TRUSTEES

EXECUTIVE DIRECTOR

INTERNAL AUDIT UNIT
CHIEF INTERNAL AUDITOR

PUBLIC RELATIONS AND CUSTOMER CARE UNIT
PUBLIC RELATIONS MANAGER

PLANNING UNIT
DIRECTOR

LEGAL SERVICES UNIT
PRINCIPAL LEGAL OFFICER

FINANCE AND ACCOUNTS UNIT
CHIEF ACCOUNTANT

INFORMATION & COMMUNICATION TECHNOLOGY UNIT
ICT MANAGER

ACADEMIC UNIT
DIRECTOR

PROCUREMENT AND MANAGEMENT UNIT
PRINCIPAL SUPPLIES OFFICER

ADMINISTRATION AND HUMAN RESOURCES MANAGEMENT DIRECTORATE
DIRECTOR

HUMAN RESOURCES MANAGEMENT SECTION
ADMINISTRATION SECTION
TECHNICAL SERVICES SECTION

CANCER PREVENTION SERVICES DIRECTORATE
DIRECTOR

CANCER SCREENING AND PUBLIC EDUCATION SECTION
MEDICAL RECORDS AND REGISTRATION SECTION
EPIDEMIOLOGY BIOSTATISTICS SECTION

MEDICAL AND ALLIED HEALTH SCIENCE SERVICES DIRECTORATE
DIRECTOR

CLINICAL ONCOLOGY SECTION
SURGICAL ONCOLOGY SECTION
PHARMACY SECTION
NURSING SECTION
LABORATORY SECTION
RADIOLOGY AND IMAGING SECTION
PALLIATIVE CARE SECTION
MEDICAL PHYSICS AND RADIOTHERAPY SECTION
APPENDIX II: INTERVIEW GUIDE TO KEY INFORMANTS

1. Do you know about specifications proceedings? What are they?

2. Does your Organization follow the procurement Procedures? How?

3. Are there any challenges facing on following procurement procedures? If yes, what are they?

4. Do you know about poor specifications? does it occur in your Organization?

5. What are the causative of poor specification in your organization?

6. What are the impacts of poor specification in your Organization?

7. Are there any customer complains patterning to poor specifications? What are they?

8. How does your organizational system help to solve the challenges associated with poor specifications?

9. What exactly do you think your Organization should do to overcome the challenge of poor specification?
APPENDIX III: QUESTIONNAIRE A; SENIOR OFFICIALS AND TOP EXECUTIVES (HEAD OF DEPARTMENTS, HEAD OF SECTIONS AND USER DEPARTMENTS AT ORCI)

Dear respondent, my name is Nancy Focus Kisaka, a student at Mzumbe University Dar es Salaam Business School, pursuing Master of Science in Procurement & Supply Chain Management. I am currently conducting a research as part of requirement to complete my second degree studies, my research is basing on Procurement in ORCI: The role of Specification. I acknowledge your presence as the main stakeholder in this aspect. I wish to assure you that all information provided in this questionnaire will be treated as confidential and will be used for academic purposes only. I highly appreciate your cooperation as well as your contributions.

Instructions: Please write the correct answer.
Kindly explain, describe or elaborate.

A. Personal particulars
Gender (Male/Female) -----------------------------------------
Age----------------------------------------------------------
Position ------------------------------------------------------
Duration in the position --------------------------------------

B. Detailed Information
1. Do you have any knowledge in preparing specifications?
   (a) Yes 
   (b) No 
   If yes, kindly narrate your role in preparing the documents.
   -----------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------

2. What is the extent of preparation of specifications do you know?
   (a) Poor 
   (b) Moderate
   (c) Excellent
   (d) Don't know
3. Do poor specifications affect the operations of the institute?
   (a) Do not affect
   (b) Affects
   (c) Don't know
   If it affects, please explain.

4. How long have been working with the institute?
   (a) 6-12 Months
   (b) 1-2 Years
   (c) 2-10 Years
   (d) Above 10 years

5. Does the institute have any persistent problems associated with poor specifications?
   (a) Yes
   (b) No
   If yes, what would you say are the causes behind this situation?

6. Does your office have competent personnel responsible for preparing specifications?
   (a) Yes
   (b) No
7. How does the poor specification lead into the insufficient execution of procurement proceedings?

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8. Is there Tender Board at the institute?
   (a) Yes   (b) No

Is it appropriately staffed?

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9. What are you recommending to rectify this challenge?

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Thank you
APPENDIX III: QUESTIONNAIRE B; FOR SUPPORTING STAFF AT ORCI

Dear respondent, my name is Nancy Focus Kisaka, a student at Mzumbe University Dar es Salaam Business School, pursuing Master of Science in Procurement & Supply Chain Management. I am currently conducting a research as part of requirement to complete my second degree studies, my research is basing on Procurement in ORCI: The role of Specification. I acknowledge your presence as the main stakeholder in this aspect. I wish to assure you that all information provided in this questionnaire will be treated as confidential and will be used for academic purposes only. I highly appreciate your cooperation as well as your contributions.

Instructions: Please write the correct answer.
Kindly explain, describe or elaborate.

A. Personal particulars

Gender (Male/Female) -------------------------------------------

Age ------------------------------------------------------------------

Position -----------------------------------------------

Duration in the position ------------------------------------------

B. Interview questions

1. How long have you been at Ocean Road Cancer Institute?
   (a) 6-12 Months
   (b) 1-2 Years
   (c) 2-10 Years
   (d) Above 10 years

2. Have you been trained to develop specifications for goods, works or service?
   -------------------------------------------------------------------------------------
   -------------------------------------------------------------------------------------

3. How have specifications been prepared at Ocean Road Cancer Institute?
   (a) Poor
   (b) Moderate
   (c) Excellent
   (d) Don’t know
4. Do you think performance of Ocean Road Cancer Institute Cooperatives been affected as a result of poor specifications?

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5. Have you being appointed to be a member of evaluation committee?
   (a) Yes
   (b) No

6. If yes, what problems did you face when evaluating the bidding documents?


7. Have you been involved in receiving incoming goods?
   (a) Yes
   (b) No

8. If yes, what problems did you face in receiving the incoming materials in the store


9. What are your recommendations to rectify this challenge?


Thank you