# UNIVERSITY OF DAR ES SALAAM

## UNIVERSITY ESTATES SERVICES POLICY

## FINAL

*As approved by the 262nd meeting of the UDSM Council*

NOVEMBER 2020

**OFFICE OF THE DEPUTY VICE CHANCELLOR – ADMINISTRATION**

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# LIST OF ACRONYMS

| | |
|---|---|
| AMIS | Asset Management Information System |
| AMP | Asset Management Plan |
| CCTV | Closed-Circuit Television |
| CoET | College of Engineering and Technology |
| CoHU | College of Humanities |
| CoSS | College of Social Sciences |
| DAWASA | Dar es Salaam Water and Sewerage Authority |
| DUCE | Dar es Salaam University College of Education |
| DVC | Deputy Vice Chancellor |
| GIS | Geographic Information System |
| IMS | Institute of Marine Sciences |
| IPTV | Internet Protocol Television |
| KPI | Key Performance Indicator |
| LGA | Local Government Authority |
| UDSM-MCHAS | UDSM-Mbeya College of Health and Allied Sciences |
| MUCE | Mkwawa University College of Education |
| TANESCO | Tanzania Electric Supply Company Limited |
| UDASA | University of Dar es Salaam Academic Staff Assembly |
| USAB | University of Dar es Salaam Student Accommodation Bureau |
| UDSM | University of Dar es Salaam |
| WASH | Water, Sanitation and Hygiene |

# FOREWORD

The Directorate of Estates Services is responsible for managing University's estates. Within the University premises, there are many buildings, facilities and properties that we use for teaching, research, accommodation and as offices. The University of Dar es Salaam community and its decision-making organs need a policy to manage its estates services and asset investments.

Since its formation in 2016, the Directorate of Estates Services has been performing its functions without a clear Estates Services Policy. As a result, the Directorate has been facing many challenges which have affected its performance. For this reason, the University has decided to develop a policy that will guide the directorate in performing its duties and eventually improve its performance for the benefit of the University.

The objective of this policy is to enhance the delivery of estates services for a conducive living, working, teaching and learning, and investment environment on University land so as to enable the University to fulfil its mission.

As a starting point and way forward, I encourage the various University units to use the Estates Services Policy to continue the effort that has been going on. By doing so, we will ensure that the estates services are satisfactorily provided.


Prof. William A. L. Anangisye
**VICE CHANCELLOR**

# CHAPTER 1

# INTRODUCTION

## 1.1 Background

The University of Dar es Salaam (UDSM) was first established on 1st July 1961 as an affiliate College of the University of London. In 1963 it became a Constituent College of the University of East Africa together with Makerere University College in Uganda and Nairobi University College in Kenya. On 1st July 1970, by an Act of Parliament No. 12, the University of Dar es Salaam was established as a National University with all the enabling legal instruments of the constituent colleges. The University was established with three main objectives, namely:

(a)  To transmit knowledge as a basis of action, from one generation to another;

(b)  To act as a centre for advancing frontiers of knowledge through scientific research; and

(c)  To meet the high level human resource needs of the Tanzanian society.

Currently, the university operates under legal provisions provided in the Universities Act of 2005 and the UDSM Charter of 2007.

The University of Dar es Salaam is the oldest and biggest public university in Tanzania. It is situated on the western side of the city of Dar es Salaam, occupying 1,625 acres on the observation hill, 13 kilometres from the city centre.

The University that started with only one Faculty of Law, with 13 students, has grown in terms of student intake, academic units and academic programmes. It now has 2 constituent colleges 7 campus colleges, 4 schools, 6 institutes and 8 centres.

## 1.2 Vision, Mission and Core Values of the University

The UDSM Vision (**UDSM Vision 2061**): "To become a leading centre of intellectual wealth spearheading the quest for sustainable and inclusive development".

**The UDSM mission**: "To advance the economic, social and technological development of Tanzania and beyond through excellent teaching and learning, research and knowledge exchange".

**The core functions of UDSM** as reflected in the above mission statement are:
  - Teaching and learning

- Research and innovation
- Knowledge exchange

## 1.3    Scope of the policy

This policy covers two main areas, namely Estates Management Services and Central Support Services. Under Estates Management Services, the policy covers the following areas:
(a)    Design and Construction of Buildings
(b)    Land Ownership, Land Use, Landscape Management and Space Management.
(c)    Rehabilitation and Maintenance of Buildings and related infrastructure.
(d)    Service and Maintenance of Plant and Equipment.
(e)    Water, Sanitation and Hygiene.
(f)    Cleaning Services.
(g)    Plans, Directions, Names of Buildings, Signage and Room Numbering.
(h)    University Asset Management System.

Under Central Services, the policy covers the following areas:
(a)    Fire Safety and Rescue
(b)    Campus Safety and Security
(c)    Catering Services.
(d)    Energy and Utilities.
(e)    Recycling and Waste Management.

## 1.4    Rationale and Justification for the Estates Services Policy

The Directorate of Estates Services has been operating since 2016 after the upgrading of the then Estates Department. The Directorate has been performing its functions without a clear Estates Services Policy; as a result, the Directorate has been facing many challenges that affect its performance. It is against this background that the University formed a Team to develop a policy to guide the Directorate in performing its duties and eventually improve its performance for the benefit of the University.

The Terms of Reference for developing the policy were:
i.    To review the existing provision of estates services at the University
ii.    To determine key estates services areas and establish policy issues, policy statements and strategies
iii.    To establish mode of governance and management of the Directorate of Estates Services including necessary human resources and composition of the Estates Committee.

iv.    To compile outputs of the above and prepare a comprehensive Estates Services Policy together with monitoring and evaluation criteria and processes.

## 1.5    Structure of the policy document

This policy document is organised in five (5) chapters. Chapter one provides background information on the University estates and rationale for having a University Estates Services Policy. Chapter two provides Situation Analysis followed by Chapter three which provides policies on various areas. Chapter four provides the required Management set up of the Directorate of Estates Services and Chapter 5 covers Monitoring and Evaluation.

# CHAPTER 2

# SITUATION ANALYSIS

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## 2.1 ESTATES MANAGEMENT SERVICES

### 2.1.1 Design and Construction of Buildings

The University has evolved over more than half a century, with each new building added in a way that expressed its particular need. As a result, there have been many different building designs, architectural styles and materials. The University is characterised by a density of constituent colleges, campus colleges, schools, directorates and many other units. The buildings are designed with different scales and proportions; and are built with different materials.

Primary building projects – from small extensions to major renovation and construction – are expected to produce facilities that will serve the University for many years. As new facilities are created and existing ones renovated, we need to strive to have a long campus development plan as our guide.

In a university campus set up, individual buildings should be designed to maximize the opportunities for social and intellectual exchange. Public spaces should be generous, provide places for conversation, and be visible to those using buildings and passing by them. Each college or school should have both indoor and outdoor spaces suitable for gatherings and social occasions. While there will always be pressure to maximize the proportion of dedicated spaces in buildings, their success will ultimately depend upon balancing the public and private spaces.

Open space, comprised of streets, walkways, courtyards, plazas, gardens and playfields, has the potential to knit together the diverse elements of the campus in a coherent way.

As part of the University Master Plan, a campus development plan should be prepared to set guiding principles and recommendations for future development. Each new building and site improvement project should be consistent with the plan.

### 2.1.2 Land Ownership, Land Use, Landscape Management and Space Management

The University is situated on spectacular hill landscape features and is therefore very attractive. The University estate provides the physical environment in which colleagues work, and in which our students study and live. University

Physical Infrastructure (and therein management of space), is one of the enablers in meeting the University's strategic goals, and this should be specified under the University's Strategic Plan KPIs and Targets. The purpose of the Directorate of Estates Services is to support and enable the delivery of the University's strategic goals. The University's estate covers a substantial land area at the main campus (Mwalimu Nyerere Mlimani Campus covers over 456 Hectares gross area), Constituent Colleges (MUCE and DUCE), UDSM-MCHAS and IMS.

Optimisation of space should be one of the core objectives of the Estates Directorate, with a strategy of "making strides to improve our use of space and deliver increased value for money".

The long term goal in the Estates Management Services Strategy is to occupy the most 'fit for purpose' and cost effective space utilisation.

### 2.1.3 Rehabilitation and Maintenance of Buildings and related Infrastructure

Since the establishment of the University, there has been an evolution of the designs and construction methods. As for now, the University owns buildings of different categories. The first category are those built in the period 1960 - 1980; the second are those buildings designed and constructed in the period1980 - 2000; and the third category are those built in period 2000-todate. Naturally, the first and second categories of buildings (e.g. CoET, CoHU, CoSS and student halls of residence) are susceptible to roof leakages and other types of degradation where there is no regular maintenance). Usually, regular maintenance faces a number of challenges, e.g *financial constraints, absence of regular inspection and maintenance plans, staffing and maintenance facilities as well stocked maintenance materials.* If left unchecked, the situation can lead to progressive deterioration of the structures and related facilities. As such, the buildings would then require major rehabilitation and, in some cases, complete face-lifting.

### 2.1.4 Service and Maintenance of Plant and Equipment

The University owns a lot of plant and machinery. Like buildings, infrastructure and other assets, plant and equipment have important functional values. Their values normally decline with time and natural deterioration and maintenance is, therefore, necessary if their values have to be maintained. Among the notable plant, machinery and equipment are the water pumping machines, standby power generators, engineering workshop machines, mass printing facilities in various units of the University, office machines (computers, air-conditioners,

freezers and refrigerators, telephone handsets), and all teaching and learning workshops and laboratory equipment.

In the process of development, the University will need and acquire more and more machinery and equipment including workshop and laboratory equipment. In the course of operation of the equipment, maintenance of the same will be crucial.

The University faces a number of challenges in servicing its plant and equipment. These include, but not limited to the following:
(a) Some equipment and machinery are maintained by respective departments and others are left to the University to handle.
(b) In cases where equipment are not serviced or repaired in time, there will be a serious problem of the piling of unserviceable equipment.

It is evident that maintenance of a so wide variety of university equipment needs a well-designed maintenance strategy, coordinated planning as well as a technically equipped University Estates Directorate.

## 2.1.5 Water, Sanitation and Hygiene Services

The provision of safe water, sanitation and hygiene (WASH) in educational institutions is crucial and necessary for the improvement of health and for boosting educational achievement.

Safe water supply and hygienic sanitation facilities are the two basic essential amenities the University community needs as top priority for a healthy living. While provision of safe drinking water takes precedence in the order of provision of basic amenities to the community, the importance of hygienic sanitation through properly designed facilities, e.g. conventional sewerage and/or sewerage treatment cannot be overemphasised. Waste water, which unless properly collected, conveyed, treated and safely disposed-off, may eventually cause environmental degradation. The provision of safe drinking water alone is therefore not enough to break the chain of disease causing pathogens. Safe disposal of the wastewater is very important.

WASH at the University has many challenges, with the most frequently reported issues related to erratic and inadequate water supply. Inadequate water supply would usually lead to problems with sanitation and hygiene.

## 2.1.6 Cleaning Services

Cleaning services at the University are outsourced. A cleaning services company is expected to provide a highly proficient, motivated and effective workforce, which is committed to providing a high standard of cleaning services in

University buildings and surrounding areas, thereby assisting the core business of the University and creating an environment which is conducive to work and aesthetically pleasing for University students, employees, and visitors.

Cleaning companies are responsible for the day to day cleaning of all areas within University buildings. Duties include toilet cleaning, emptying of recycling bins, dry and damp mopping, spray cleaning, and cleaning of fixtures and fittings, and windows.

Private companies are also responsible for the collection and removal of litter and leaves from the campus, sweeping of roads and pathways, taking care of flowers and trees, grass cutting and gardening.

However, cleaning services companies are *not responsible* for the management of computer, laboratory and clinical wastes as well *as pest control*. At the same time, the University has Terms of Reference and guidelines for Cleaning *Services* against which the performance of the Cleaning Services Company is assessed by a team on monthly basis. The guidelines and Terms of Reference can be improved by the introduction of university-wide cleaning standards.

## 2.1.7 Plans, Directions, Names of Buildings, Signage and Room Numbering

The University has a range of varying external and internal signage systems and styles on the campus and in its various buildings. Signage is necessary in some areas such as buildings and roads. Campus maps are necessary for visitors to cross-site navigate and to allow them to orient themselves with the campus as a whole, and to direct them to desired areas of the University.

## 2.1.8 University Assets Management

By definition, assets are tangible or intangible resources owned by the University that have service potential or future economic benefits. Major asset classes within the University are:
   i.   land;
  ii.   buildings;
 iii.   plant and equipment (including ICT assets);
  iv.   works of art;
   v.   cultural, scientific or technology collections; and
  vi.   library collections.

For an institution as large and diverse as the University of Dar es Salaam, the management of physical and intangible assets is an enormous and complicated responsibility. The University owns assets that include infrastructure, buildings, plant, information technology, special equipment, special collections,

audio visual and a vehicle fleet. The assets must be tracked from the time they are acquired to the time they are disposed-off. In between, they may be moved, depreciated, lost, etc. Their location, value, custodianship, disposition, and other information must be kept up-to-date and made available to University financial administrators, auditors, project sponsors, and others with a need to know.

### 2.1.9 University Housing (Halls of Residence, staff housing and guest accommodation)

The University has a University Housing Policy which handles staff housing. Student dormitories and guest accommodation are handled like other buildings.

## 2.2   CENTRAL SUPPORT SERVICES

### 2.2.1 Fire Safety and Rescue

The University is fully aware of the need for adequate provision for mitigation and handling of fire hazard and safety of the people on campus.

The University, in addition to having a huge portfolio of assets which are prone to fire, accommodates a large population including students, staff and visitors all of whom need to be protected against fire, and all other threats to safety. It has been observed that preparedness for fire fighting is inadequate. The University community (staff, students and even visitors) lacks knowledge and awareness on what to do in the event of fire outbreak.

Within the University premises, including residential houses and halls of residence, there is a wide variety of fixed and portable electrical appliances, which, if not well managed and serviced property, pose fire outbreak risk.

Most of the University buildings are equipped with fire fighting equipment, but with different levels of sophiscation. In most buildings, there is fire-fighting equipment but fire detection systems (smoke detectors and alarm system) may be lacking.

### 2.2.2 Campus Safety and Security

The University campus is large and its boundaries are quite porous with uncontrolled entries. There is some degree of control for motor vehicles and cycles, but a large portion of the University area remains uncontrolled. This situation poses a security and theft risk to University property and the community. It is therefore imperative that the University puts in place technological safeguards and properly trains its auxiliary police and other community members.

## 2.2.3 Provision and Management of Catering Facilities and Services

The University offers a range of catering places and facilities for students, staff and visitors at different outlets across the main campus and constituent colleges. The outlets range from grab and go (at Mama Lishes) to sit-down cafes and restaurant-like cafeteria such as Hillpark and student cafeteria. Generally, there is something to suit everyone, whatever your needs are.

However, there are concerns regarding standards for food preparation, transportation, dispensing services and storage. The concerns are mainly based on:
   (i) Kitchen structure and facilities as well as their locations.
   (ii) Environmental degradation due to the type of fuel (e.g. gas, charcoal) being used and disposal of its wastes.
   (iii) Transportation of food from the kitchen to cafeteria, canteens and other locations
   (iv) Vending and dispensing locations and facilities
   (v) Washing locations and facilities for kitchen utensils and cutleries
   (vi) Disposal of left-over and food wastes, ashes, etc.
   (vii) Food prepared outside the University premises may pose a health risk if not certified.

## 2.2.4 Energy and Utilities Services

The University has many buildings, plants and equipment that demand energy for their proper operation. These include lighting, office machines, ICT and other teaching and learning equipment as well as space cooling and air conditioning systems. The University's traditional source of electricity has been the Tanzania Electric Supply Company (TANESCO). On the other hand, the University could explore possibilities on the use of alternative energy sources and actually install alternative energy equipment where possible. At the same time, the University could prepare guidelines for the University community to embrace a tradition of energy saving and cost cutting.

As for water supply, the University relies wholly on DAWASA which has some supply challenges as TANESCO has for electricity supply. DAWASA used to supply water to the University through very old and leaking main supply pipe network. As the system is being revamped, there is need for regular upgrading of the water supply network, maintenance of the water pumping system and curbing unnecessary leakage. The University is generally faced with the following challenges:

 (a)      Leakages, which may lead to unsafe water supply and unnecessarily huge water bills
 (b)      Growing University population exerting pressure on water supply
 (c)      Lack of rainwater harvesting to augment DAWASA water supply

(d)      Uncollected storm water which could be managed for use by the University community.

## 2.2.5      Recycling and Waste Management

The University has a large number of staff, students, service providers and visitors who are involved in teaching, research and service provision activities and therefore a large amount of varied waste streams is produced. It is therefore necessary for the University to develop sustainable waste management practices across all its activities. This will entail provision of appropriate recycling schemes and facilities for the collection of priority waste streams - laboratory waste, batteries, cans, cardboard, glass, metals, paper products, plastic bottles, waste electrical and electronic equipment and wood.

## 2.3   LEGAL FRAMEWORKS

In developing the University's Estates Services Policy, it was important to study various policies, acts and regulations which are relevant to policy issues and strategies.  Such relevant policies, acts and regulations are for example: The Environmental Management Act, 2004 and its regulations; Fire and Rescue Force Act No. 14 0f 2007 (Safety Inspections and Certificates) Cap. 427 and Amendment Regulations, 2012.

**2.3.1 Fire and Rescue Force Act** (Safety Inspections and Certificates) Cap. 427 and Amendment Regulations, 2012 Act No. 14 of 2007 and Fire And Rescue Force Act (Cap. 427), Fire and Rescue Force (Fire Precautions In Buildings) Regulations, 2015.

### Definition of public buildings

Section 24(1) of the Fire and Rescue Act No. 14 of 2007, defines public buildings as large school, factory, department store or any building or place where many people enter, work or live. In this context, the meaning of public building does not focus on the ownership but rather the use. That is a building might be privately owned but it is a public building if it is being used by the public.

### Fire precaution in public buildings

This is an Act to provide for the better organization, administration, discipline and operation of Fire and Rescue Force. Section 22 of the Fire and Rescue Act No 14 of 2007 Act provides for fire precautions in buildings.

(a)      Section 22 (1) states that every building which has a storey the floor of which is more than twelve meters above the level of the street or ground

surface adjoining any part of the building or a building of two thousand square meters in gross floor area shall be provided in every such storey, with either:

(i) Adequate free and unobstructed means of escape from there leading to the roof of the building and to the street or ground surface adjoining the building;

(ii) Fire alarm and detection system; or

(iii) Such other means of escape in the event of fire as the Commissioner-General  may require, save that the Commissioner General may, by  notice published in the *Gazette*, exempt any building or category of  buildings from the provisions of this section on the basis of technical grounds.

(b) Section 22 (2) states that every building which has a storey the floor of which is more than twenty four meters above the level of the street or ground surface shall be provided in every room, office and hall with automatic fire sprinklers.

(c) Section 22 (3) states the owner of any building to which sub sections (1) and (2) applies who fails to provide a means of escape or automatic fire sprinklers   in accordance with the provisions of sub section (1) or who fails to maintain  and  keep  such  means  of  escape  or  automatic  fire sprinklers so provided in good condition, order and repair, commits an offence and shall be liable on summary conviction to a fine not exceeding one million shillings.

## Inspections on fire safety features

The owners and users of public buildings must maintain the installed features and the Fire and Rescue Force is required by section 15(3)(b) of the Fire and Rescue Act No. 14 of 2007 to conduct inspections for purposes of compliance with safety requirements within the area of jurisdiction. Section 15(3)(c) of the Fire and Rescue Act No. 14 of 2007 indicates that the force shall issue *fire safety certificates* to those who complied with fire safety requirements, where relevant. According to the Fire and Rescue Force (safety inspections and certificates) Regulations of 2008, Regulation 12, the certificate will remain valid for one year.

The Fire and Rescue Force should conduct both routine and ad-hoc inspection to assess the level of fire safety in public buildings and during inspection. The force is required to check whether fire safety equipment have been adequately installed, maintained and are working properly and issue inspection report to owners of public buildings for improvement.

## Designation of Fire protection manager

Section 24(1) (b) of the Fire and Rescue Act No. 14 of 2007 requires that, every person who owns or manages a high rise building, large school, factory, department store or any building or place where many people enter, work or

live, or deals with chemical or petrochemical activities, *to designate a fire protection manager* whose function shall be:

(a)     To prepare fire and rescue action plan;
(b)     To organize *regular fire drills* in order to ensure that all persons employed in or using the premises or part thereof, are familiar with all means of escape in case of fire;
(c)     To inspect and maintain fire protection equipment or fire-fighting equipment such as fire extinguishers, detectors, etc.


The University is aware of the need for adequate fire protection and safety of the people and is, therefore, obliged to observe these regulations during design, construction and occupation of its buildings.


## 2.3.2 The Public Procurement Act, 2013, its Regulations and Amendments, 2016

This is an Act to make better provisions for public procurement. Section 50 of the Act provides for procurement of common use items and services by the procuring entity if it determines that:

(a)     The need for procurement is expected to rise on repeated basis during a given period of time;
(b)     By virtue of the nature of the procurement, the need for it may arise on urgent basis during a given period of time; and
(c)     Other grounds and circumstances that justify recourse to framework procedure

Contracts for works and services form a substantial part of Estates Services in the University. Their preparations, award and management should conform to the Act and its regulations. Suppliers and service providers are to be contracted for value for money. Any delay or deficiency in the process will adversely affect the delivery of estates services.

## 2.3.3 The Environmental Management Act, 2004

This Act provides for legal and institutional framework for sustainable management of the environment. Among many sections on environmental management, Section 81 provides for carrying out Environmental Impact Assessment studies as follows:

(a)     Section 81.-(1) states that a proponent or a developer of a project or undertaking of a type specified in the Third Schedule to this Act, to which environmental impact assessment is required to be made by law on such project or undertaking, or in the absence of such law, by the regulations by the Minister, shall undertake or cause to be undertaken, at the developer's own cost, an environmental impact assessment study.

(b)   Section 81.-(2) states that an Environmental Impact Assessment study shall be carried prior to the commencement or financing of a project or undertaking.

(c)   Section 81.-(3) states that a permit or license for the carrying out of any project or undertaking in accordance with any written law shall not entitle the proponent or developer to undertake or to cause to be undertaken a project or activity without an environmental impact assessment certificate issued under this Act.

(d)   On waste management, Section 114 of the Act states that it is the duty of the Local Government to manage and minimize waste and provides for what is to be done by LGAs in sections 114 through 139. As result, LGAs have formulated regulations on waste management.

### 2.3.4 The Occupational Health and Safety Act No 5, 2003

This is an Act that repealed the Factories Ordinance Act of 1950 to make provision for the Safety, Health and Welfare of persons at work and to provide for the protection of persons at work and others who may be affected by work hazards caused by others.

### 2.3.5 The Occupational Safety and Health (Building and Construction Industry) Rules, 2015

The Occupational Safety and Health (Building and Construction Industry) Rules, 2015, apply to building operations and work of engineering construction by way of trade, business, industrial or commercial undertaking or on behalf of Government, be it local government or a public building. The duties and responsibilities of all players are provided for within the need to prevent occupational accidents, illness and diseases in the sector. There are 145 rules to ensure prevention.

### 2.3.6 National Occupational Safety and Health Policy 2010.

The national policy on occupational safety and health has the promotional framework of Occupational Safety and Health (OHS) in all sectors so that each stakeholder has its responsibilities; explicitly showing how best to provide desirable working conditions and utilize it as a guideline for more specific requirements in their areas of specialization, competency, interest and jurisdiction.

# CHAPTER 3

## UNIVERSITY ESTATES SERVICES POLICY

### 3.1 Objectives of the policy

The main objective of the policy is to enhance delivery of estates services for a conducive living, working, learning and investment environment on University land so as to enable the University fulfil its mission. The specific objectives of this policy are:
(a)   To ensure efficient and cost effective property management, infrastructure development and management.
(c)   To ensure efficient and cost-effective estates management services
(d)   To develop and manage land use and investment master plan.
(e)   To ensure provision of properly managed centrally supported services.
(f)   To ensure hygienic and environmentally friendly provision of catering services.
(g)   To ensure provision and proper management of energy and utilities (electricity, piped water and rain-harvested water, gas, ablution and drainage system).
(h)   To ensure waste water and environmental management of University estates.
(i)   To ensure provision of proper landscape management services including roads, pathways and parking.
(j)   To ensure development and implementation of property maintenance plan.

### 3.2   Major Policy Issues, Statements and Strategies

### 3.2.1 Design and Construction of Buildings

#### (a)   Policy issues

The following issues are inherent in design and construction of University buildings:

(i) Architectural Style
Buildings on the campus reflect many styles, and the essential quality of the campus is one of buildings that speak in their own voice about their purposes and the era in which they were built. New buildings should express the aesthetic

ideas of our times, so that as we look back on them they also become a cultural record of ideas about architecture and campus life.

(ii) Responsible use of energy and natural resources

(iii) Commitment to accessibility

(iv) Need to review designs before implementation

## (b)    Policy statement

(i)  The University shall ensure consistent and uniform architectural design for buildings of similar functions, including building materials and colours.

(ii) Each project should undertake a comprehensive analysis to diminish the use of energy and reduce the use of non-renewable resources.

(iii) The university is committed to providing equal access to all buildings for those with disabilities and to doing so in a dignified manner.

## (c)    Policy strategies

All new construction must be designed to allow access for those with disabilities. Renovations of historic buildings should seek to improve access for disabled persons in a manner compatible with their historic integrity.

The university should engage architects who are recognized leaders, and aspire to design each structure so it not only suits its occupants and addresses its physical and historical context, but also contributes to ways of thinking about buildings.

Each building project shall be designed with the following goals:

(i)  Reducing marginal energy costs by promoting selection of locally manufactured or fabricated products and materials; by integrating innovative day-lighting and building engineering solutions at project inception and the use of appropriate mechanical and construction technology for natural cooling, light recovery, passive solar design, etc.

(ii) Siting new structures mindful of orientation, shading and the effect on adjacent buildings and spaces.

(iii)  Maximising building flexibility to satisfy the varied demands of current and future users and residents.

The University will establish a Design Review Committee constituted by a university architect, the university Directorate of Estates Services, several academic staff members who are design professionals, and outside architects drawn from the extended university community.

The committee's role shall be to advise the University on the merits of projects being designed for the campus.

### 3.2.2 Land Ownership, Land Use, Landscape Management and Space Management

**(a)    Policy issues**

Issues related to this category include:
(i)      Land ownership.
(ii)     Master planning including land use planning
(iii)    Landscape management
(iv)     Space planning and optimisation
(v)      Boundary demarcation and securing

**(b)    Policy statement**

The University shall:
(i)      Endeavour to secure title deeds for all of its pieces of land.
(ii)     Develop master plans for the growth and transformation of its campuses.
(iii)    Secure its boundaries and put in place a landscape management plan.
(iv)     Develop a geographic information system for space planning and management

**(c)    Policy strategies**

The Directorate of Estates Services shall put in place a well-defined Physical Planning Unit (PPU) that will provide professional guidance for the long term planning of the physical environment as well as leveraging space to its highest utilization.

The Unit shall be responsible for providing leadership on campus planning, capital development planning, space planning and management, landscape planning and management, developing a geographic information system and building information archives.

### 3.2.3 Rehabilitation and Maintenance of Buildings and Infrastructure

**(a)    Policy issues**
Most of the University buildings and infrastructure, especially those built in the past 10 years and before, are aging and therefore need maintenance and in some cases rehabilitation.  There exist a number of challenges with respect to maintenance and rehabilitation of buildings and related infrastructure. The challenges include:

(i)      Financial constraints
(ii)     Maintenance strategy and plans
(iii)    Staffing and maintenance facilities and stocked materials within the Directorate of Estates Services

**(b)    Policy statement**

The University shall:
  i.   Require the Directorate of Estates Services to put in place a well defined inspection and maintenance system.
  ii.  Ensure adequate staffing in the Directorate of Estates Services
  iii. Ensure there are clear and efficient processes/procedures for requesting repairs/minor works.
  iv.  Ensure there are maintenance facilities (tools and equipment) as well as stocked maintenance materials.

**(c)    Policy strategies**
  i.   Put in place a well-defined inspection and maintenance plan
  ii.  Reorganise the Directorate and ensure adequate staffing
  iii. Put in place clear and efficient processes/procedures, including developing an Estates Services Management Information System (ES-MIS) where all works shall be requested online, assigned and traced to completion


### 3.2.4 Service and Maintenance of Plant and Equipment

**(a)    Policy issues**

Service and Maintenance are the cornerstone of asset sustainability. An effective preventive maintenance programme, combined with good operational practices, will reduce the need for much corrective and emergency maintenance, as well as total operating cost. A good preventive maintenance program will service not only mechanical and electrical equipment, but also the infrastructure and utility systems required to support the production process within the University.

Service and Maintenance must be performed so that production assets and systems operate efficiently and effectively. Improper maintenance and repairs can lead to unsafe conditions and reduced system performance. Failures caused by a lack of, or improper, maintenance can result in significant risks to occupational health and safety.

Maintenance includes all functions required to keep a plant or facility operating in accordance with its original design capacities and performance. Usually, maintenance includes repairs to broken, damaged, or worn-out equipment, i.e. corrective maintenance; periodic replacement of asset, equipment and facilities that have reached the end of their design life, i.e. periodic replacement; and tasks designed to preserve or sustain normal operating condition, i.e. preventive

maintenance. The University lacks a comprehensive service and maintenance system for its plant and equipment assets which should have the following components:

i.  *Plant and Equipment Component Inventory*

The backbone of any maintenance programme/plan is a comprehensive listing or inventory of all plants, system components and equipment. The listing should contain a name and code number to every part of the system. The name should be both unique and descriptive as to the function or nature of the item. The coding system should include fields or descriptors associated with the equipment type, location in the system, original installation date, life expectancy, etc.

ii.  *Manufacturer's Literature*

For each asset, piece of equipment or maintainable component, manufacturer's literature should be obtained, catalogued and compiled into a usable reference library. For a new or upgraded facility, it is often the supplier's responsibility to provide manufacturer's information for all installed equipment. When a supplier provides this literature, it is best to request multiple copies so that copies can be kept at the facility and elsewhere in a separate permanent file.

iii.  *Comprehensive maintenance plan and schedules*

Once all of the equipment and components have been itemized and the manufacturer's literature has been collected, it will be necessary to develop a comprehensive list of maintenance tasks and to schedule them. All maintenance tasks must be identified with a frequency and duration that is accurate enough for initial scheduling. Records must then be kept indicating which maintenance tasks have been performed and when.

iv.  *Tools and Equipment*

Every plant and equipment must have suitable tools and the required specialised equipment must be available to perform maintenance. These tools and equipment should be of good quality, because they are likely to be used for many years. In addition, tools and equipment must be maintained in good working order, so that they are available for use at any time. This requires an organised storage, inventory and prompt replacement of lost or broken items.

v.  *Spare Parts Inventory*

It is important to maintain an inventory of spare parts required for preventive maintenance, as well as for corrective and emergency maintenance. The initial inventory must be developed based on the requirements of each preventive

maintenance task. Procedures also should be implemented to make sure that parts are replaced in the inventory as they are used. Database management of spare parts inventories is usually necessary in larger utilities.

*vi. Personnel Training*

Having a well-developed maintenance programme is not good enough. The University will need a well-trained staffing both in how to carry out the maintenance programme and in the precise skills required to perform specific maintenance tasks. Similarly, on new equipment, manufacturer's representatives must be required to train them as a condition of sales agreements. It may be necessary to make arrangements for new staff to obtain specialized maintenance training on particular equipment. In addition, maintenance personnel should be encouraged to obtain additional training in maintenance and related activities through staff development programmes locally or overseas.

*vii. Budgeting for Maintenance*

Service and maintenance will require sufficient funding. The University therefore needs to set a budget for the purpose.

## (b) Policy Statement

The University shall:
  i. Establish plant and equipment component inventory
 ii. Collect all manufacturer's literature, catalogue and compile into a usable reference library
iii. Develop a comprehensive list of maintenance tasks and implement a comprehensive and workable maintenance schedules. All maintenance tasks must be identified with a frequency and duration
 iv. Equip the Directorate of Estates Services with adequate and well trained staffing, materials, tools and equipment.

## (c) Policy strategies

Service and maintenance for all assets are necessary, if the University wants to sufficiently benefit of its plant and machinery. However, it is only through the development of a proper preventive maintenance plan that maintenance is likely to be performed in a complete and consistent manner. A good maintenance programme must include sufficient planning, record keeping, sufficient budgets, skilled staffing, and resources to get the job done.

### 3.2.5 Water, Sanitation and Hygiene Services

#### (a) Policy issues

Water, sanitation and hygiene services are important aspects for healthy living, working and learning conditions in the University. The major components for good sanitation and hygiene services are collection and disposal of liquid waste in terms of sewage and storm water. There is increasing generation of wastewater due to the growing population of the University. The University has wastewater stabilisation ponds, which serve most parts of the University. However, there are areas that may not be served by the facility.

With increasing pavements and built-up area, generation of storm water will increase. Storm water drainage is mainly through open channels along roads and in cases, storm water exceeds the capacity of some of the existing drains. Rainwater harvesting and storage, if practised by the University, could reduce the flow of water in the drains as well as cut down water bills.

With the current population and the envisaged expansion of the University, the following issues will be inherent in the University's Water, Sanitation and Hygiene services:

(i)     Access to safe and adequate water for drinking and hand washing
(ii)    Wastewater collection and treatment and reuse
(iii)   Storm water management
(iv)    Rainwater harvesting

#### (b) Policy statement

The University shall ensure a healthy and liveable environment and shall ensure and sustain good public health and environment for the community, with a special focus on safe water and hygienic sanitation facilities. In particular, the University shall:
  i.    Ensure access to safe water for drinking and other uses across the entire University campuses through revamped water supply network, rainwater harvesting and storm water collection and treatment.
  ii.   Ensure that ablution blocks are adequate for the growing population; and are clean and hygienic and all wastewater is collected and properly disposed-off or treated for other uses where possible.

#### (c) Policy strategies
  i.    To monitor WASH status (quality and other conditions) in the University to identify and solve community health problems related to WASH. This should be done by having a designated officer within the Directorate of Estates services.

ii. To improve water supply network and practise rainwater harvesting by designing and building rainwater harvesting network.
iii. To collect storm water by designing and building a storm water collection and treatment system.
iv. Undertake research for new insights and innovative solutions to WASH problems.

## 3.2.6 Cleaning Services

### (a) Policy issues:

The University hires companies for the day to day cleaning of all areas within University buildings and its surrounding compounds. But the University does not have a *Cleaning Services Standard* against which the performance of cleaning services companies will be assessed. The purpose of such a Service Level Standard is to describe the *key services* which the company provides and *the quality* which the University aims for in terms of service delivery.

The Standard should set out:
 (i) The key services to be provided by the companies.
 (ii) The overall standards which the University aims to achieve in the provision of cleaning services.
 (iii) Procedure and mechanism for University community feedback.
 (iv) Procedure and mechanism to measure performance of the contracted company.

### (b) Policy statement

The University shall:

 i. Ensure there is a *Cleaning Services Standard* against which the performance of cleaning services companies will be assessed.
 ii. Ensure fumigation services are provided for pest control.
 iii. Ensure computer, laboratory and clinical wastes are regularly collected and properly disposed-off.
 iv. Hire cleaning services companies that are well-equipped and with highly proficient, motivated and effective workforce, which is committed to providing high standard cleaning services in University buildings and the surroundings.

## (c) Policy strategies

### (i) Measuring performance

The University to regularly monitor and measure performance of cleaning services companies using a methodology that considers the following:
- Stakeholders' satisfaction with the services.
- Target performance of the standard cleaning specification.
- Total number of comments from customers

### (ii) *Customer feedback*

The University shall carry out an annual survey, in the form of a user questionnaire, of the effectiveness and satisfaction with the cleaning services. The results of this survey will be used to develop an annual plan which will outline improvement measures.

### (iii) *Services and response times*

The University to require cleaning services companies to provide cleaning services to buildings and the University compound in line with the following specification shown in an example in Table 1. However, by agreement the specification can be varied to reflect the needs and priorities of the University.

**Table 1: Example of Specification for Services and Response Times**

| Area | Specification | Frequency |
|---|---|---|
| Offices | Damp and Dust all furniture and fittings | Daily |
| | Dry and damp mop/vacuum floors | |
| | Shampooing of carpets and upholstery | Fortnightly |
| Sanitary Areas | Empty waste bins | Daily |
| | Clean WCs, urinals, and washbasins | Three (3) times a day |
| Lecture Theatres/ Classrooms | Empty waste bins | Daily |
| | Sweep and clean floors | Daily |
| | Dry and damp mop/spray clean/vacuum floor | Bi-weekly |
| | Clean all fixtures and fittings | Bi-weekly |

| Area | Specification | Frequency |
|---|---|---|
| Laboratories | Empty waste bins | Daily |
| | Dry and damp mop/spray clean floors | Bi-weekly |
| Staircases | Sweep stairs | Daily |
| | Damp mop stairs | Weekly |
| | Clean handrails, ledges etc. | Weekly |
| Corridors | Empty recycling bins | Daily |
| | Sweep and clean floors | Daily |
| | Damp dust all furniture and fittings | Bi-weekly |
| | Damp mop/spray clean/vacuum floor | Bi-weekly |
| Window/Door cleaning | Cleaning of all glass on both sides in all types of window frames, fanlights, doors and internal partitions | At least three times a week |
| Exterior cleaning | Collection and removal of all litter from roads and footpaths on the University campus | Daily |
| | Collection of cardboard, confidential waste and other office paper, computers and mobile phones, plastics, cans and glass for recycling | Weekly |
| | Grass cutting and mowing | Weekly |
| | Watering flower and taking care of plants | Bi-weekly |

### 3.2.7 Plans, Directions, Names of Buildings, Signage and Room Numbering

**(a)    Policy issues**

The University has a range of inconsistent and varying external and internal signage systems and styles within campus and in its various buildings. There is no signage at all in some areas and buildings. There are no campus maps for visitors to cross-site navigate and to allow them to orient themselves with the campus as a whole, and to direct them to the desired area of the University.

An effective way-finding and signage strategy for the University can only be achieved if a consistent approach for external and internal signs is used across all of the University campuses and buildings, in terms of both appearance and content. It is obvious that the absence of way-finding and signage strategy as well as the absence of names of buildings and room names adds confusion to users and visitors and reduces the prestige of the University.

Recently, the University has put in place a Brand Identity Manual, which sets out to guide on the best way to promote and protect the University name and visual symbols, including signage standards.

**(b)    Policy statement**

Hand in hand with the University branding policy, the University shall introduce, procure and install all new external and internal way-finding signage in the proposed system and style so that there is clear, consistent and convenient guidance to all external and internal systems.

**(c)    Policy strategies**

External Signage

The University to provide external signage in the following forms:
(i)     *Campus Maps*, preferably on monoliths, in well-lit areas, with a full list of buildings, colleges, schools, institutes and service names.
(ii)    *Directional signs placed in key areas* to direct people to the required buildings. These shall illustrate routes to accessible entrances once closer to the building. These signs are either: Monoliths situated at key circulation nodes, or Fingerposts situated elsewhere on the campus where direction is of greater importance.
(iii)   *Building names* situated adjacent to their main entrance or written/engraved on the front wall, along with any other key information required, such as directing to an alternative accessible entrance. These are generally wall mounted, except where the    signage   is   not   easily

visible on approach. In these situations monoliths may be used to increase the visibility of the sign.

A school/college/ in single occupation of a building may have its name on a sign outside the main and secondary entrances. This sign will not be the same format as a building sign, but will be a larger version of the regulatory sign format. Lists of multiple occupants should not be shown on external signs.

Where a building is occupied by more than one school/college, *Name signs* will be situated within the building in the reception area to inform people of the area they are about to enter into. Signs should preferably be wall mounted. Other formats may be suspended or projecting.

(iv)   *Regulatory and information* signs to be used throughout the campus to display any other relevant information not covered by the other signs in this package, e.g. CCTV, wheel clamping, etc.

## Internal Signage

The University to provide internal signage in the following forms:

(i)   *Directional signs*
Upon entering a building, there should be signs situated in the reception areas or entrances to buildings to welcome visitors to the building and inform them of the occupants and their locations (if necessary this may also include level information). *Reception signs* should be wall mounted.

In the reception area, there will be *Directional signs* to guide and direct people to occupants or facilities within that building, or to buildings that are linked or adjacent. Directional signs will operate across the levels of any building and guide people to lifts and stairs for vertical circulation. Directional signs may be wall mounted, suspended or projecting.

(ii)   *Room names*
Signs for *Room Names* will be placed on the doors to rooms throughout the University. They will inform people of the *room name (e.g. Library, Registrar)* and *number* and if required they will provide additional information of opening times or *occupants* (e.g. Dr. Amani M. Upepo).

(iii)   *Regulatory and information signs*
Regulatory and information signs will be used throughout the buildings to display any other relevant information not covered by the other signs in this

package, such as toilets, access requirements, security and other building operational information. Regulatory signs may be wall or door mounted.

### 3.2.8 University Assets Management

**(a)    Policy issues**

The University has an obligation to manage its assets in a manner that provides acceptable standards of service in a cost-effective manner.

The objective of asset management policy is to articulate the operational and data management framework which are essential to:
 (i) maintain control over physical assets purchased and owned by the University;
 (ii) provide accurate asset information for the annual financial statements of the University which is required for accrual reporting purposes;
 (iii) assist in the calculation of insurance values for University assets and provide substantiation of losses for insurance claims;
 (iv) allow audit verification of additions to and deletions from the asset register; and
 (v) ensure compliance with requirements in legal obligations.

The University's asset management framework should identify key elements associated with asset management, namely acquisition, use, disposal and investment. For property, plant and equipment the framework needs to consider a 'whole of life' approach including operational requirements, acquisition, enhancements, and disposal of assets, all of which have an impact on asset valuations and depreciation. The following are policy issues that need to be covered:

   i.    Recording of asset information
   ii.   Notification of changes to assets
   iii.  Stocktaking
   iv.   Asset security (damage, theft and loss)
   v.    Asset loans
   vi.   Asset disposal (removal of University identification, disposal of ICT equipment, disposal of motor vehicles, disposal of real estate assets)

**(b)    Policy statement**

The University shall:
   i.    Develop and implement an Asset Management Plan (AMP).
         This is a plan developed for the management of infrastructure asset classes with a view to operating, maintaining and renewing the assets

within the class in the most cost-effective manner possible, whilst providing a specific level of service.

ii.  Develop and implement an Asset Management Information System (AMIS). The system shall be comprised of the following software applications:

- Infrastructure and facilities management system
  The system shall contain comprehensive data on the University's sites, buildings and assets, including space and occupancy, real property, leases, capital works and maintenance projects, work requests, parking spaces and permits, utilities and audio-visual equipment.
- Spatial/graphical information system.
- Web-based spatial/graphical information system for enquiry.
- Web portal and reporting tool.
- Asset Register in which all University assets are registered.

iii.  Ensure that heads of responsible centres exercise efficiency and economy in acquiring assets on University's behalf and observe University and Government purchasing policies and regulations.

## (c)  Policy strategies

### (i)  Rental of assets
When not required for University purposes, University assets may be hired to staff and outside bodies on terms and conditions for user charging. However, rental of assets will be carefully exercised and subject to a specific policy of the University.

### (ii)  Loss or damage of assets
Heads of University units are to be responsible for reporting any loss of or damage to assets as soon as possible to the office responsible for Assets Management and where relevant to Auxiliary Police Commander, who will take action to recover the assets or prevent the loss from recurring.

### (iii)  Write-off of assets
Action to write-off assets must be in accordance with the University's Financial and Asset Management Regulations.

### (iv)  Disposal
Disposal of items can be made when assets are no longer required, have reached the end of their useful life, or are technically or economically redundant. University units are provided with the flexibility of choosing how to dispose-off their assets through methods described in the Public Procurement and Disposal Regulations.

**(v)     Assets review**

It is proposed to undertake an annual review of assets (including impairment test) to verify the existence of assets recorded in the Fixed Assets Register and to assess the serviceability of those assets (remaining life and depreciation rate). Any discrepancies are to be investigated by the responsibility centre.

**(vi)    Control of assets**

In addition to above controls, heads of responsibility centres should also:

- Implement procedures ensuring, as far as possible, the security of assets under their control
- Ensure assets are properly maintained with a view to maximising the period of effective use
- Ensure assets are not exposed to any hazards.

### 3.2.9 Fire Safety and Rescue

**(a)    Policy issues**

The University recognises that fire is a major risk to the lives of its staff, students and members of the public who visit the University. The loss of buildings and infrastructure due to fire also poses significant risks to the teaching and learning functions of the University.

The University is committed to providing a safe environment for its staff, students and visitors. Part of this safety responsibility is in the provision and management of fire safety systems and procedures. All members of the University, their visitors and contractors, have a statutory responsibility in ensuring compliance with the law and complying with the fire safety provisions defined within this policy.

The University needs, therefore, to ensure that fire safety is a priority in all areas under its control.

**(b)     Policy statement**

The University shall ensure, so far as is reasonably practicable, that the risk associated with fire will be managed in compliance with the Fire and Rescue Force Act (Cap. 427), Fire and Rescue Force (Fire Precautions in Buildings) Regulations, 2015 and Fire and Rescue Force (Safety Inspections and Certificates) Cap. 427 and Amendment Regulations, 2012. In particular, the University shall:

(i)    Create and maintain suitable and sufficient fire risk assessments of all premises and activities within premises;

(ii)   Identify and implement reasonably practicable control measures to control risks from fire;

(iii)  Provide suitable and sufficient information, instruction and training in fire safety to all staff and to provide training in the use of fire extinguishers where appropriate;

(iv)  Develop, implement and maintain managed evacuation procedures;

(v)  Regularly test evacuation and other emergency procedures and maintain all emergency and precautionary equipment;

(vi)  Conduct regular fire safety inspections;

(vii)  Ensure effective liaison with the local fire authority where appropriate.

### (c)  Strategies

The following strategies are meant to provide a robust fire safety framework which will be implemented to secure the safety and well-being of everyone within the University community and to protect the University's assets.

(i)  Fire Safety Management

The Directorate of Estates Services shall ensure arrangements are made in respect of the maintenance of fire safety provision for the University premises. This will include ensuring the following:

- Fire warning and detection systems are maintained in accordance with the relevant standard.
- Fire fighting equipment, including fixed installations and specialist systems, are subjected to a maintenance plan in accordance with the manufacturer's guidelines.
- Means of escape are maintained as required
- Emergency lighting, escape lighting and signage are maintained and tested in accordance with the relevant standard.
- Electrical installation tests are undertaken as required.
- Fire safety measures are included in the designs and construction of buildings, and in particular, include designated areas of escape such as exit staircase, exit passageway, escape corridors; and assembly points.
- A Fire Protection and Safety Manager within the Estates Services Directorate is designated. The duties and responsibilities of the Manager will be to prepare fire and rescue action plan, to organize *regular fire drills* in order to ensure that all persons employed in or using the premises or part thereof, are familiar with all means of escape in case of fire, to inspect and maintain fire protection equipment or fire-fighting equipment such as fire extinguishers, detectors, etc.

(ii)  Fire Warning System

A fire warning system is a system designed to provide an audible alarm and may include activation by means of detecting the elements of combustion. In all cases the alarm can be activated by means of a manual alarm call point. Manual

alarm call points are normally situated in exit routes and at final exits. Where fire is known or suspected, the alarm should be immediately raised utilising a manual alarm call point (break glass point). On hearing an alarm all occupants of a premise (employees, students and the public) must evacuate the building by the nearest available exit and assemble at the prescribed assembly point.

(iii)    Fire Fighting Equipment and Fire Suppression Systems

Fire fighting equipment shall be provided within fire exit routes and may be placed adjacent to some specific risk areas, such as computer servers, electrical transformers, etc. The extinguishers shall be provided for use by trained competent persons but should only be used when it is safe to do so and the escape route from the seat of fire is not compromised. Under no circumstances should a fire be confronted without first raising the alarm. All employees are required to familiarise themselves with the extinguishers provided within the relevant premise and the fire classification that may influence their limitations of use.

Where any fire fighting equipment has been used or is deemed unsatisfactory, the Fire Safety Manager should be advised to facilitate replacement or investigation as necessary.

Fire suppression systems (e.g. sprinkler systems) including any dry and wet risers shall be installed. They must be tested by the manufacturer or approved contractor according to manufacturer's instructions and good practice.

(iv)    Electrical Equipment in offices, residential houses and halls of residence

All electrical equipment powered by mains electrical supplies must have been approved and must be available for inspection by staff of the Directorate of Estates Services.

Organisers of events using electrical appliances must comply with all requirements of appropriate fire safety measures.

All equipment to be used in residences which have the potential to act as an ignition source or contain flammable materials can only be used with the approval of the Directorate of Estates Services.

(v)    Means of Escape and Fire Compartmentation in Buildings

It is essential that all means of escape are kept clear of obstructions and flammable materials. All emergency exit doors must be clearly identified and should open in the direction of exit and should not require a key to open them. Gas cylinders, portable heating appliances, reams of paper or other sources of fuel or ignition must not be stored in escape routes.

The main control of the spread of fire and smoke is the compartmentation of buildings which include the walls and doors. Fire doors in corridors should provide at least 30 minute fire protection and fire doors to Protected Escape routes should provide 60 minute fire protection. Such doors should also include smoke seals which will stop the spread of smoke.

All walls, floors and ceilings to compartments should be sealed to form protection against the spread of fire and smoke. Where there are penetrations to such compartment walls (eg to run IT cabling or other piping), these should be fire sealed after the work is completed.

(vi)    Fire Safety Assessment and Inspections

The Directorate of Estates Services will arrange for annual fire risk assessments of all buildings within the University. The buildings will be assessed for the risk of fire and also for the fire precautions /warning systems fitted in the building by specialists in this area. A report will be produced with specific recommendations for the improvement of fire safety within the building concerned.

All Units of the University should undertake fire safety inspections of their properties on a regular basis, at least once in a year. These fire inspections should use an appropriate checklist to ensure:

- There is good housekeeping;
- Fire escapes including corridors/ stairways (inside and outside) are not blocked;
- There is no excessive amounts of highly flammable materials being stored in work areas;
- All significant ignition sources are properly managed;
- All fire doors are in good condition.


### 3.2.10    Campus Safety and Security

**(a)    Policy issues**
The University is committed to the safety and welfare of students, staff and visitors through the establishment of reasonable practices that (1) support a safe and secure environment in all buildings and grounds owned and/or operated by the University; (2) promote safety through policies and strategies; (3) provide an appropriate level of security at university activities; and (4) safeguard the university's property and physical assets.

All staff, students and other members of the University community share responsibility for the safety and security of the institution and must conduct

university activities and operations in compliance with applicable University policies and regulations.

Individual employees, students, and other members of the community are also strongly encouraged to accurately and promptly report crimes, emergencies, potential threats, or risks to the University Management for investigation and action.

## (b)     Policy Statement

The University shall ensure the security and safety of all students, staff, visitors and service providers, as far as is reasonably practicable, whilst within or situated on University premises.

## (c)     Policy strategies

### i.    Surveillance and Crime prevention

The University to deploy CCTV cameras and recording devices within and around the University estate to assist in the prevention, investigation and detection of crime, the apprehension and prosecution of offenders (including use of images as evidence in criminal proceedings), public, employee and student safety and for monitoring security of premises at the University.

The University to install street lights and security lighting on buildings and in parking areas.

The University to install uniform well-designed simple burglar-proof structures to strategic entries.

The University Auxiliary Police shall undertake the following:

- Performing regular visible patrols of the facilities to watch for potential safety hazards and crimes;
- Performing regular checking to ensure buildings are locked and secured;
- Documenting detected problems;
- When necessary, providing Safe Walk services by accompanying students and/or staff across campus to make sure they can safely traverse the campus without fear of personal harm.

### ii.   Access Control

It is the policy of the University that after normal working hours all facilities shall be locked and secured in order to maintain the safety of both the facilities and their contents including any staff and/or students.

Academic and administrative buildings are open to the public during operating hours and shall generally be secured after operating hours and during extended breaks.

Keys and cards shall be issued for entry to University facilities for the purpose of conducting University business only. The most effective security happens when all University employees and students share in the responsibility of ensuring the safety integrity of all campus facilities.

### 3.2.11 Catering services

**(a) Policy issues**

The term "catering" applies to the purchase and serving of food, beverage and food-related items for consumption on University premises.

The University is committed to the provision of high-quality catering services to students, staff and internal and external clients. Where possible, this service is to be provided in a manner which is consistent with the University's strategic goals on safety, health and environmental sustainability.

Further, the University is committed to sustainable practices and encourages the minimisation of all waste on campus, in particular plastic. University food outlets and catering services are to use reusable catering supplies and/or catering supplies compatible with the University's waste management practices.

**(b) Policy statement**

(i) The provision of catering on University premises, whether by the University or otherwise, is required to meet all applicable health, safety and food legislation.

(ii) In the case of catering undertaken by the University, the Directorate of Estates Services is responsible for ensuring compliance with all relevant health, safety and food legislation. They should be able to provide proof of a valid business license for the specific operation and a certificate of liability insurance.

(iii) In the case of catering undertaken by any other body on University premises, that body shall ensure all catering services (food preparation facilities, transportation facilities and eating areas) are modern and are hygienically and environmentally acceptable.

(iv) To ensure compliance to all relevant health, safety and food legislation, only certain facilities can be catered to. Approval of catering areas is required from the Directorate.

**(c) Policy strategies**

(i) Kitchen and cooking facilities

The University to provide proper kitchen structures and cooking facilities and ensure environmentally and hygienically acceptable cafeteria services.

(ii) Food Handling/Food Vending

In order to ensure proper food handling to avoid the risk of illness and possible liability by the University for expenses associated with individuals getting sick, all food must come out of approved kitchens. Food vendors must provide to the University a Health Certificate (Certificate of Compliance) issued by a relevant authority. Additionally, this policy must be adhered to in order to ensure compliance with all country's Safety, Health and Environmental Rules and Regulations.

(iii)    Monitoring and Inspection

*The University shall appoint a person certified in food handling* to ensure compliance of the policy. It may be necessary for the University to establish a Unit responsible for Safety & Risk Management or Safety, Health and Environmental Management, whose responsibility shall be to monitor and inspect, on regular basis, safety, health and environmental conditions related to catering services.

### 3.2.12    Energy and Utilities Services

### (a)    Policy issues

The University recognises that energy efficiency improvement is one of the most cost-effective ways to ensure the reliability of energy supply, reduce energy-related emissions, assure affordable energy bills and improve financial sustainability. Further, the University recognises that Energy Audit is the key to a systematic approach for decision-making in the area of energy management. It attempts to balance the total energy inputs with its use, and serves to identify all the energy streams in a facility. With the current population and the envisaged expansion of the University, the following issues will be inherent in the University's energy and utilities services:

(i)      Uninterrupted electricity supply.
(ii)     Use of alternative energy sources, such as solar power.
(iii)    Management of energy use.
(iv)     Automation of water/electricity metering system for staff houses and service providers.

### (b)    Policy Statement

The University shall ensure the availability of reliable power and control the use of energy resources for sustainability.

**(c)     Policy strategies**

    i.   Ensure sustainable energy supply by combining TANESCO power supply, standby generators, inverters and alternative/sustainable sources such as solar energy.

   ii.   Integrate energy management into day-to-day operations.

  iii.   Reduce energy use and consumption, and improve energy efficiency.

  iv.   Support the purchase of energy efficient products and services.

   v.   Ensure that energy performance improvement opportunities are considered in the design of new, modified and renovated facilities and equipment.

  vi.   Prepare and implement annual energy and utilities audit.

### 3.2.13 Recycling and Waste Management

**(a)     Policy issues**

Vast amounts of both solid and liquid waste are produced and need to be properly collected, stored, processed, treated or disposed-off in accordance with the principles of good practices. The following issues are related to Recycling and Waste Management at the University:

   (i)   Handling of solid wastes.

  (ii)   Handling of e-waste, used batteries and other hazardous wastes.

 (iii)   Disposal or Recycling of general waste paper and confidential paper materials.

 (iv)   Waste segregation

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**(b)     Policy statement**

The University shall commit to safe and efficient waste management, to reduce and recycle waste produced and to ensure compliance with and exceed all legal requirements relating to waste management. Also, to promote environmental and recycling issues as an integral element of its activities and demonstrate its commitment to continual improvement in environmental practices.

The University shall put in place adequate systems for environmental management to ensure a good environment for living, working and learning through the most efficient and cost effective contract administration system. In particular, the University shall be committed to operate by the principles of reduce, re-use and recycle.

**(c)     Policy strategies**

The University shall require all staff, students, service providers and anyone else making use of University premises to comply with this Policy and associated directives. In particular, it is expected that all members of the University

community, tenants in University premises and University appointed service providers will adhere to the following standards:

i. Waste should be prevented or minimised wherever possible. If waste is produced, opportunities for repair, composting and reuse should be enabled when appropriate and only then should recycling, energy recovery, incineration or landfill disposal be considered.

ii. All Waste produced must be stored, carried, kept, processed, treated or disposed off in accordance with the principles of good practices.

iii. Waste must be securely stored in compliant and suitable containers and locations pending uplift and disposal. In particular:

- The fabric and construction of the container must be resistant to the nature of the waste (e.g. corrosive, sharps) and suitable for the storage environment.
- The container will be securely sealed to prevent accidental spillage/ leakage.
- Adequate security precautions should be taken to prevent loss, theft, vandalism, or unauthorized access or scavenging of waste.
- Segregation of waste should take place to prevent mixing of incompatible materials and to allow for recycling.
- Waste collections should not prevent safe access or passage of people.
- Waste should not be stored in an inappropriate location, e.g. in pathways, roads, near a plant or electrical switch rooms, near heat or ignition sources or hinder access to equipment.
- Waste bins shall be placed wherever there is potential for waste disposal.

iv. Waste removed from University premises must only be transported by persons or service providers who are authorised to do so and subsequently treated, processed or disposed-off in suitably authorised and approved facilities.

v. The Director of University Estates Services shall be responsible for co-ordinating the provision of appropriate and authorised central recycling and waste handling contract services for use by the University and, where appropriate, tenants within University buildings. The following are some of guiding principles:

a. Waste segregation shall be done at the University.

b. Recycling of office paper: The University will operate a recycling scheme for office waste paper. Cardboard boxes and waste baskets are to be provided to departments by the cleaning services company. The boxes will be emptied by the cleaning staff as necessary.

c. Confidential waste paper & cardboard collection: The University will provide disposal procedure for confidential waste paper.

d. Disposal of redundant IT equipment and computers and phones: All old and redundant electrical and communication equipment are

classed as hazardous waste. The University shall ensure that all redundant IT equipment, computers and phones are be placed in special refuse bins and should be regularly collected and removed from University premises via centralised contracts or incinerated in appropriately designed incinerators. Alternatively, they should be recycled where possible.

e. Disposal of printer toners & cartridges: All used printer toners and cartridges should be placed in recycling boxes located in each academic/administrative department on campus. They should then be regularly collected, disposed-off or recycled.

f. Disposal of batteries: Domestic type batteries can be disposed-off by sending to cleaning services companies which will ensure that they are recycled. They must not be put in with the general refuse. Depleted Lithium or Cadmium rechargeable batteries or Mercury containing batteries or Lead Acid batteries are "special wastes" and should therefore not go in the general waste skips, since they have to be treated as chemical waste.

g. Treatment of Bio-Medical Solid Waste: The management of a bio-medical waste is a subject of considerable concern to public health administrators, infection control specialists, as well as the general public. It is a well-known fact that healthcare activities generate various types of hazardous and infectious material. It is therefore important that biomedical wastes are collected and properly disposed-off in properly controlled incineration.

h. Staffing of the Directorate of Estates Services: will be improved to enable monitoring of the performance of the contracted firms.

# CHAPTER 4
## GOVERNANCE AND MANAGEMENT OF THE DIRECTORATE OF ESTATES SERVICES

## 4.1 Establishment of the Directorate of Estates Services

The University Estates Department was established in the University of Dar es Salaam Act of 1970 as a supporting department responsible for management of the University estates.

At its establishment, the Estates Department had the following staffing as shown in Table 1.1.

**Table 1.1: Staffing of the University Estates Department until year 2016**

| S/No. | Staff category | | | Available |
|---|---|---|---|---|
| 1. | Estates Manager (EM) | | | 1 |
| 2. | Deputy EM | | | 1 |
| 3. | Personal secretary | | | 1 |
| 4. | Administrative Officer | | | 1 |
| 5. | Transport Officer | | | - |
| 6. | Security Officer | | | - |
| 7. | Foreman | | | 6 |
| 8. | Auxiliary Police | | | - |
| 5. | Estates Officers | Engineers | Civil | |
| | | | Electrical | |
| | | | Mechanical | |
| | | Architects | | 1 |
| | | Quantity Surveyors | | 2 |
| | | Procurement officers | | 3 |
| | | Estates Officer | | - |
| 6. | Technicians | Civil technicians and draftsmen | | 2 |
| | | Electrical | | 3 |
| | | Mechanical | | 2 |
| 7. | Artisans | Masons | | |

| S/No. | Staff category | | Available |
|---|---|---|---|
| | | Painters | - |
| | | Plumbers | |
| | | Carpenters | 3 |
| | | Electricians | 2 |
| | | Motor Vehicle Mechanics | - |

However, in 2016, the University upgraded the then Estates Department to the Directorate of Estates Services. The Directorate is responsible for University's estates management and it performs the following key functions:

(i) To facilitate and carry out maintenance and rehabilitation of all University buildings and infrastructure.

(ii) To oversee and coordinate new construction activities within the University.

(iii) To ensure that the University has good and sustainable environment through proper landscaping and waste management.

(iv) To liaise with utility agencies to ensure regular maintenance of municipal services at the University.

(v) To ensure proper furnishing and functioning of all University buildings.

(vi) To facilitate and ensure proper design, review and implementation of the University Land Use Master Plan.

The current establishment of the Directorate of Estates Services is as shown in Table 1.2.

**Table 1.2: Current Establishment of the University Directorate of Estates Services**

| S/N | Staff category | | | Establishment | Available (2019) |
|---|---|---|---|---|---|
| 1. | Director | | | 1 | 1 |
| 2. | Deputy Director | | | 1 | 1 |
| 3. | Personal secretary | | | 2 | 1 |
| 4. | Administrative Officer | | | 2 | 1 |
| 5. | Transport Officer | | | 1 | - |
| 6. | Security Officer | | | 1 | - |
| 7. | Foreman | | | 8 | 6 |
| 8. | Auxiliary Police | | | | 1 |
| 5. | Technical Staff | Engineers | Civil | 4 | - |
| | | | Electrical | 2 | - |
| | | | Mechanical | 2 | - |
| | | Architects | | 1 | 1 |
| | | Quantity Surveyors | | 4 | 4 |
| | | Procurement officers | | 3 | 3 |
| | | Estates Officer | | 1 | 1 |
| 6. | Technicians | Civil technicians and draftsmen | | 2 | 2 |
| | | Electrical | | 3 | 3 |
| | | Mechanical | | 2 | 2 |

| S/N | Staff category | | Establishment | Available (2019) |
|---|---|---|---|---|
| 7. | Artisans | Masons | 4 | 1 |
| | | Painters | 2 | - |
| | | Plumbers | 15 | 13 |
| | | Carpenters | 5 | 3 |
| | | Electricians | 5 | 2 |
| | | Motor Vehicle Mechanics | 1 | - |

## 4.2 Functional Structure of the Directorate of Estates Services

For the Directorate to function properly and deliver quality services, the University shall:
  i. Review the current technical staffing and ensure adequate staffing
  ii. Ensure adequate tools, equipment and facilities
  iii. Ensure fast moving stocked materials to facilitate prompt maintenance and repair.
  iv. Re-organise the Directorate into functional organisation structure. That is, there should be desk officers for each of the important areas of estates services, e.g. Maintenance and Rehabilitation, Service and Maintenance of plant and Equipment; Water, Sanitation and Hygiene (WASH); Fire, Safety and Security; Catering and Cleaning Services; and Recycling and Waste Management.

## 4.3 Composition of the Estates Services Committee

The Estates Services Committee is a committee of the Council. Its main function is to advise Council on management of the University movable and immovable assets. The University Council appoints one of its members as Chairperson of the Committee.

The composition of the Estates Committee is determined by the University Council.

# CHAPTER 5
## MONITORING AND EVALUATION

## 5.1    Monitoring

In order to ensure that the strategies for achieving the objectives and expected results of the policy, systematic monitoring process shall be put in place. It will be the responsibility of the Directorate of Estates Services to prepare plans, monitor implementation and prepare progress reports. Table 5.1 provides a matrix of the monitoring and evaluation process and criteria.

## 5.2    Evaluation

Evaluation shall assist the University in establishing whether or not the policy has achieved its objectives and if the human and financial resources have been adequately deployed and used efficiently to facilitate the implementation of the policy. It is therefore important for the University to have a plan for regular evaluation and review of the policy.

**Table 5.1 Strategies, Monitoring and Evaluation Criteria**

| S/N | Policy Area | Strategy | Evaluation Criteria/Output |
|---|---|---|---|
| | | ESTATES MANAGEMENT SERVICES | |
| 1. | Land Ownership, Land Use, Landscape Management and Space Management | Establishment of Physical Planning Unit | i. Capital development plan<br>ii. Space management plan<br>iii. Landscape management plan<br>iv. Geographic information system for buildings and infrastructure information |
| 2. | Rehabilitation and Maintenance of Buildings and related Infrastructure | i. Put in place a well-defined inspection and maintenance plan<br>ii. Reorganise the Directorate and ensure adequate staffing<br>iii. Put in place clear processes/procedures for requesting repairs/minor works<br>iv. Ensure the Directorate has adequate maintenance facilities (tools and equipment) as well as stocked maintenance materials<br>v. Ensure availability of adequate funds through budgeting | i. A well-defined inspection and maintenance plan<br>ii. New Organisation structure with staffing<br>iii. Procedures for requesting repairs/minor works<br>iv. Inventory for maintenance facilities (tools and equipment) as well as stocked maintenance materials<br>v. Budget allocation |

| S/N | Policy Area | Strategy | Evaluation Criteria/Output |
|-----|-------------|----------|----------------------------|
| 3. | Service and Maintenance of Plant and Equipment | i. Establish a database for University assets.<br>ii. Prepare, put in place and implement a comprehensive and workable maintenance schedules.<br>iii. Equip the Directorate of Estates Services with adequate staffing (incl. well-planned use of hired labour), materials, tools and equipment.<br>iv. Allocate adequate financial resources | i. A database for University assets.<br>ii. Comprehensive and workable maintenance schedules.<br>iii. Staffing, materials, tools and equipment<br>iv. Budget allocation |
| 4. | Water, Sanitation and Hygiene (WASH) | i. Ensure access to safe water for drinking across University campuses<br>ii. Ensure that ablution blocks are adequate for the growing population; and are clean and hygienic.<br>iii. Ensure that *Female students' and visitors' needs* are considered in the provision of ablution services | i. Improved water supply network plan<br>ii. Rainwater harvesting network<br>iii. Storm water collection and treatment system<br>iv. Additional ablution blocks |

| S/N | Policy Area | Strategy | Evaluation Criteria/Output |
|---|---|---|---|
| 5. | Cleaning Services | Regularly measure, monitor and report on cleaning companies' performance | i. Performance standards and regular reports<br>ii. Taking prompt action to address shortcomings |
| 6. | Plans, Directions, Names of Buildings, Signage and Room Numbering | Install a consistent external and internal way-finding signage across the University | i. Campus maps<br>ii. Roads and street name plates<br>iii. Directional signs placed in key areas to direct people to various buildings<br>iv. Buildings names<br>v. Regulatory and information signs<br>vi. Reception signs<br>vii. Room Numbering |
| 7. | University Asset Management System | Take inventory and put in place fixed asset systems | Database and e-Register for University assets |
| | CENTRAL SUPPORT SERVICES | | |
| 8. | Fire Safety | i. Ensure there is fire-fighting and fire detection equipment in each building.<br>ii. Ensure there is rescue plan and designated assembly areas.<br>iii. Ensure periodical and timely inspection of buildings<br>iv. Organize regular fire drills.<br>v. Inspect and maintain fire protection equipment or fire- | i. Fire-fighting and fire detection equipment as well as emergency lighting and direction signs in each building.<br>ii. A rescue plan and designated assembly areas.<br>iii. Periodical and timely inspection of buildings plan.<br>iv. A plan for regular fire drills. |

| S/N | Policy Area | Strategy | Evaluation Criteria/Output |
|-----|-------------|----------|----------------------------|
| | | fighting equipment such as fire extinguishers, fire detection systems, etc. <br> vi. Include fire safety measures during designs of buildings <br> vii. Designate a Fire Protection Manager | v. Plan for inspection and maintenance of fire protection equipment or fire-fighting equipment. <br> vi. A designated Fire Protection Manager. |
| 9. | Safety and Security | i. Deploy CCTV cameras and recording devices in designated areas of the University <br> ii. Install street lights and other types of lighting <br> iii. Install uniform, well-designed and simple burglar-proof structures to strategic entries <br> iv. Carry out regular patrols during the day and night. | i. A GIS map with locations of CCTV cameras and recording devices. <br> ii. A street lights map. <br> iii. Uniform, well-designed and simple burglar-proof structures installed at strategic areas. <br> iv. Duty roster and facilities for regular patrols during the day and night. |
| 10. | Catering services | i. Provide proper kitchen structures and cooking facilities and ensure environmentally and hygienically acceptable cafeteria services. <br> ii. Ensure Proper Food Handling/Food Vending | i. Proper kitchen structures and cooking facilities. <br> ii. Standards for proper food handling/ food vending adhered. <br> iii. A Unit responsible for Safety & Risk Management or Safety, Health and Environmental Management established and a person certified in food handling appointed. |

| S/N | Policy Area | Strategy | Evaluation Criteria/Output |
|-----|-------------|----------|----------------------------|
|  |  | iii. Appoint a person certified in food handling to ensure compliance of the policy.<br>iv. Establish a Unit responsible for Safety & Risk Management or Safety, Health and Environmental Management. |  |
| 11. | Energy and Utilities Services | i. Put in place sustainable energy supply by combining TANESCO power supply with power generation sets and renewable energy sources.<br>ii. Improve internal water supply capacity<br>iii. Adopt technologies for treating wastewater for re-use in gardening, toilets and elsewhere.<br>iv. Install automated water/electricity metering system for staff houses and service providers<br>v. Prepare and implement annual energy and utilities audit. | i. A sustainable energy supply plan in place.<br>ii. The old water supply network revamped.<br>iii. Rainwater harvesting and storage system designed and storm water reservoir built.<br>iv. A plan for treating wastewater for re-use in gardening, toilets and elsewhere.<br>v. Automated water/electricity metering installed in all relevant areas.<br>vi. Schedule for annual energy and utilities audit. |

| S/N | Policy Area | Strategy | Evaluation Criteria/Output |
|-----|-------------|----------|----------------------------|
| 12. | Recycling and Waste Management | Waste produced must be stored, carried, kept, processed, treated or disposed off in accordance with the principles of good practices. | i. Guidelines for waste segregation.<br>ii. A recycling scheme for office waste paper prepared and implemented.<br>iii. Disposal procedure for confidential waste paper.<br>iv. Plan for disposal of redundant IT equipment and computers, printer toners & cartridges, mobile phones and batteries developed and implemented.<br>v. Incineration kilns for bio-medical and laboratory solid waste available. |