



# STRATEGIC PLAN

2014/15 – 2023/24





# STATEMENT FROM THE CHAIRMAN



**RICHARD S. APIRE**  
Chairman, Electricity Regulatory Authority

Electricity is an essential factor of production in Uganda's development agenda. To ensure adequate supply of this resource now and in the future at affordable prices calls for pristine planning. As the industry regulator, the Electricity Regulatory Authority (ERA) is central in the planning process for this industry. To this end, ERA has formulated a ten-year Strategic Plan, which is expected to drive the industry to the next level.

It is my pleasure therefore to present the ERA ten-year (2014/15 – 2023/24) Strategic Plan. The Plan is a product of wide consultations with both internal and external stakeholders. The input received from these stakeholders was analysed and a consensus reached on the most suitable strategic direction that ERA should adopt during the strategy period.

I therefore trust that the Plan reflects the expectations of our stakeholders.

This Strategic Plan takes cognizance of the existing policy and legal framework at international, regional and national levels. More specifically, the Plan has taken into consideration the Common Market for Eastern and Southern Africa (COMESA) and East African Community (EAC) energy agenda, Uganda's Vision 2040, the five-year National Development Plan covering the period up to 2015 and the Rural Electrification Strategy and Plan. During this planning horizon, ERA's focus will be directed towards ensuring power supply security and sustainability of the electricity supply industry, improved sector efficiency and facilitating increased access to electricity. Our role will therefore be to establish a regulatory framework that will facilitate achievement of these key outcomes hence contribute to national socio-economic development.

During this implementation period, ERA will continue to remain alert to emerging issues and developments and where appropriate, revise the strategic priorities in line with the evolving conditions.

We at ERA have the will, ability and commitment to implement this Strategic Plan and we believe that with support from all stakeholders, we shall make a significant contribution to the socio-economic transformation of Ugandans.

**RICHARD S. APIRE**  
Chairman, Electricity Regulatory Authority

# STATEMENT FROM THE CHIEF EXECUTIVE OFFICER



**BENON M. MUTAMBI, PHD**  
Chief Executive Officer, Electricity Regulatory Authority

This Strategic Plan serves as a roadmap for ERA for the next ten years 2014/15 – 2023/24. The Plan takes advantage of the foundation laid by previous plans and it emphasizes, among other things, the following key issues:-

- a) Positioning the electricity supply industry as a key enabler for achievement of Uganda's Vision 2040 and sustainable development goals;
- b) Enhancement of the regulatory framework to facilitate investments by both Government and the private sector;
- c) Promoting environmental sustainability through promoting renewable energy technologies;

- d) Ensuring security of electricity supply through optimized development of least cost generation resources and promoting energy efficiency and demand side management measures;
- e) Promoting efficiency and effectiveness in the electricity supply industry;
- f) Improving the quality of electricity supply;
- g) Enhancing objectivity, transparency and accountability to stakeholders; and,
- h) Attaining operational excellence on the identified performance metrics.

## ERA's Vision is

"To be an effective regulator that promotes safe, efficient, reliable and sustainable electricity supply".

## Our Mission is

"To regulate the electricity industry in accordance with applicable laws, policies, standards and international best practice".

ERA will pursue nine Strategic Objectives during these ten years, namely:-

- 1. Increase electricity generation to meet present and future demand through attraction of both private and public sector investment and integration of environmental concerns.



2. Promote energy efficiency and demand side management practices.
3. Strengthen national and regional electricity transmission and distribution infrastructure and enhance regional collaboration in electricity regulation.
4. Increase technical, commercial and operational efficiency in electricity generation, transmission and distribution.
5. Promote reasonable and fair pricing of electricity services.
6. Promote objectivity, transparency and accountability to stakeholders.
7. Enhance good governance, internal operating efficiency and sustainability of ERA.
8. Enhance human capital management.
9. Improve use of technology and promote optimal utilization of organizational assets.

This Strategic Plan will be delivered by a team of qualified and dedicated staff whose performance and conduct will be underpinned by professionalism, integrity, innovation, transparency and accountability, equal and fair opportunity, stakeholder sensitivity and teamwork.

I thank all stakeholders for their contribution and support over the years and request for continued support. I pledge ERA's commitment to implement this Plan and thereby contribute to socio-economic transformation of Ugandans.



**BENON M. MUTAMBI, PHD**  
**Chief Executive Officer,**  
**Electricity Regulatory Authority**

## ABBREVIATIONS

AFUR	African Forum for Utility Regulators
CBE	Cross Border Electrification
CEO	Chief Executive Officer
COMESA	Common Market for Eastern and Southern Africa
CSR	Corporate Social Responsibility
DER	Director Economic Regulation
DFAS	Director Finance and Administrative Services
DLAA	Director Legal and Authority Affairs
DTR	Director Technical Regulation
EAC	East African Community
EAPP	East African Power Pool
ECC	Electricity Consumer Committee
ERA	Electricity Regulatory Authority
EREA	Energy Regulators Association of East Africa
ESI	Electricity Supply Industry
GET-FiT	Global Energy Transfer for Feed-in-Tariff
GoU	Government of Uganda
HFO	Heavy Fuel Oil
MCP	Manager Corporate Planning
MEMD	Ministry of Energy and Mineral Development
MIA	Manager Internal Audit
MoFPED	Ministry of Finance, Planning and Economic Development
MYT	Multi-Year Tariff
NEMA	National Environment Management Authority
PCO	Principal Communications Officer
PO	Procurement Officer
PPA	Power Purchase Agreement
PPDA	Public Procurement and Disposal of Public Assets Authority
PPP	Public Private Partnership
RE-FiT	Renewable Energy Feed-in-Tariff
UBOS	Uganda Bureau of Statistics
UEDCL	Uganda Electricity Distribution Company Limited
UEGCL	Uganda Electricity Generation Company Limited
UETCL	Uganda Electricity Transmission Company Limited
UMA	Uganda Manufacturers Association
UNBS	Uganda National Bureau of Standards

# DEFINITION OF KEY TERMS

Term	Definition
<b>Balanced Scorecard</b>	An integrated strategic planning and performance management system that communicates with clarity an organization's vision, mission and strategy to employees and other stakeholders; aligns day-to-day work to vision and strategy; provides a framework for prioritizing programs and projects; and uses strategic performance measures and targets to measure progress.
<b>Core Value</b>	Fundamental beliefs which define the code of conduct, provide ethical guidelines for decision-making and define standards of behaviour.
<b>Customer</b>	Direct beneficiaries of the organization's services or products.
<b>Mission</b>	Reason why an organization exists.
<b>Outcome measure</b>	A results measure that defines what is accomplished.
<b>Output measure</b>	A results measure that defines what is produced. Outputs used efficiently and effectively lead to outcomes.
<b>Performance Indicator</b>	Measure used to assess performance in service delivery.
<b>Perspective</b>	View of an organization from a specific vantage point.
<b>Stakeholder</b>	Person with an interest in the organization's products/services and/or success, including suppliers, employees, regulators, owners, citizens, other organizations, etc.
<b>Strategy</b>	States how an organization intends to accomplish its Vision; an approach or 'game plan'.
<b>Strategy Map</b>	Displays the cause-effect relationships among the objectives that make up a strategy and tells a story of how value is created for the business.
<b>Strategic Initiative</b>	Programmes or projects that turn strategy into operational terms and actionable items; provide an analytical underpinning for decisions and provides a structured way to prioritize projects according to strategic impact. Strategic initiatives answer the question, 'what strategic projects must the organization implement to meet its strategic objectives?'
<b>Strategic Objective</b>	Continuous improvement activities that must be done to be successful. They are the building blocks of strategy and define the organization's strategic intent.
<b>Strategic Theme</b>	Key focus areas in which an organization must excel in order to achieve its mission and vision and deliver value to members. They are pillars of excellence.
<b>Target</b>	Desired level of performance for the reporting period in question.
<b>Vision</b>	An organization's picture of future success. Defines where an organization wants to be in the future.

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# 1.0 INTRODUCTION

## 1.1 Background

The Electricity Regulatory Authority (ERA) was established as a statutory body in accordance with the Electricity Act, 1999 (Chapter 145 Laws of Uganda). The Act empowers ERA to regulate the generation, transmission, sale, export, import and distribution of electrical energy in Uganda.

The first Strategic Plan of ERA was for a period of three years running up to 2003. It laid the foundation for ERA. The second Strategic Plan, also referred to as the Revised Strategic Plan, provided strategic direction for the period from 2003/04 to 2013/14, the thrust of which was increasing generation capacity. During this period, a number of achievements were realised including, development of regulatory instruments, tariff methodologies, setting of performance parameters, increase in generation capacity, network rehabilitation and expansion, organizational capacity development, to mention but a few. This third Strategic Plan takes advantage of the foundation laid by previous plans and it emphasizes, among other things, the following key issues:-

- a) Positioning the electricity supply industry as a key enabler for achievement of Uganda's Vision 2040 and sustainable development goals;
- b) Enhancement of the regulatory framework to facilitate investments both by Government and the private sector;
- c) Promoting environmental sustainability through promoting renewable energy technologies;
- d) Ensuring security of electricity supply through optimized development of least cost generation resources and promoting energy efficiency and demand side management measures;
- e) Promoting efficiency and effectiveness in the electricity supply industry;
- f) Improving the quality of electricity supply;
- g) Enhancing objectivity, transparency and accountability to stakeholders; and,
- h) Attaining operational excellence on the identified performance metrics.

The Strategic Plan will therefore serve as a roadmap for ERA for the next ten years 2014/15 – 2023/24.

## 1.2 Structure of the Electricity Industry

Following liberalisation of the electricity industry and introduction of a new legislation in 1999, the state-owned vertically integrated utility was unbundled into three separate segments, namely, generation, transmission and distribution. This was meant to enhance operating efficiency and attract private sector investment into the industry. The legislation also introduced an independent regulator and a disputes tribunal. Currently, there are several players in generation and distribution while the transmission function has remained under a state-owned company.



### 1.3 Mandate of Electricity Regulatory Authority

The Electricity Regulatory Authority (ERA) derives its mandate from the Electricity Act, 1999 (Chapter 145 Laws of Uganda) (the Act) to regulate the generation, transmission, sale, export, import and distribution of electrical energy in Uganda. More specifically, ERA is mandated to:-

- a) Regulate the provision, use and consumption of electricity in Uganda;
- b) Oversee the efficient functioning and development of the electricity industry;
- c) Promote both private and public investment in the industry in order to ensure security of electricity supply;
- d) Guarantee efficiency and effectiveness in the electricity industry;
- e) Safeguard the interests of different stakeholders; and,
- f) Promote competition in the electricity sector.

### 1.4 Functions of Electricity Regulatory Authority

The functions of ERA are spelt out in Section 10 of the Act and are listed here below:-

- a) Issue licenses for i) the generation, transmission, distribution or sale of electricity; and, ii) the ownership or operation of transmission systems;
- b) Receive and process applications for licenses;
- c) Prescribe conditions and terms of licenses issued under the Act;
- d) Modify licenses issued under the Act;
- e) Make and enforce directions to ensure compliance with licenses issued under the Act;
- f) Establish a tariff structure and investigate tariff charges, whether or not a specific complaint has been made for a tariff adjustment;
- g) Approve rates of charges and terms and conditions of electricity services provided by transmission and distribution companies;
- h) Review the organization of generation, transmission and distribution companies or other legal entities engaged in the generation, transmission and distribution of electricity to the extent that the organization affects or is likely to affect the operation of the electricity sector and the efficient supply of electricity;
- i) Develop and enforce performance standards for the generation, transmission and distribution of electricity;
- j) Encourage the development of uniform electricity industry standards and codes of conduct;
- k) Establish a uniform system of accounts for licensees;
- l) Advise the Minister regarding the need for electricity sector projects;
- m) Prepare industry reports and gather information from generation, transmission and distribution companies;

- n) Prescribe and collect license fees;
- o) Provide for the procedure for investment programmes by transmission and distribution companies;
- p) Approve standards for the quality of electricity supply services provided;
- q) Approve codes of conduct in respect of the operation of transmission and distribution systems;
- r) Acquire information and carry out investigations relating to any of its functions; and;
- s) Perform any other function that is incidental or consequential to its function or as may be conferred on it by any other law.

## 1.5 Purpose of the Strategic Plan

The purpose of the ten-year Strategic Plan is to facilitate ERA to achieve its Vision “To be an effective regulator that promotes safe, efficient, reliable and sustainable electricity supply”. The plan is intended to translate the Vision and Mission of ERA, drawn from its mandate and statutory functions, into strategies and priority actions to be implemented in the medium to long term in fulfilment of the expectations and aspirations of all the industry stakeholders.

The plan presents holistic strategies for judiciously balancing the ERA's regulatory mandate and functions with priority actions that are necessary for enabling the fulfilment of the statutory obligations and promoting the development of the electricity supply industry both in terms of capacity development and power sector growth.

The plan also serves to relate the power sector policy priorities with the National Development Plan provisions, provides strategies and interventions for addressing the power sector development framework priorities for the medium to long term, and ensures alignment with the East African regional integration agenda for the electricity supply industry.


## 1.6 Strategy Development Process

ERA has adopted an integrated strategic planning and performance management system, the Balanced Scorecard (BSC), in developing this Strategic Plan. The Balanced Scorecard (BSC) approach communicates with clarity the Vision, Mission and Strategy to employees and other stakeholders and utilizes strategic performance measures and targets to measure progress. The BSC provides feedback around both the internal business processes and external outcomes in order to continuously improve strategic performance and results.

A consultative approach was adopted in the development of the Strategic Plan. A wide spectrum of stakeholders was consulted including:-

- (a) Policy makers (Government Ministries, Departments and Agencies);
- (b) Collaborating Regulatory and Professional Institutions; and,



- 
- (c) Public Groups; (i) Licensees, investors and utility operators who are the Electricity Supply Industry (ESI) players/Supply Side Stakeholders; and (ii) Diffused groups who constitute mainly the demand side stakeholders.

Various key legal, policy, planning and consultancy documents were also reviewed to inform the situational analysis of the national economic environment, the electricity supply industry and ERA's regulatory experience to-date. To inform the Strategic Plan development, relevant information and data from the literature review and stakeholder consultations was compiled, analyzed and interpreted to derive key strategy drivers, the resulting themes and key objectives that must be pursued over the next ten years.

## **1.7 Structure of the Strategic Plan**

The rest of this Plan is structured as follows:- Chapter Two highlights the legal and policy framework within which ERA operates. Chapter Three presents the situational analysis of the electricity supply industry and stakeholders' aspirations and expectations. Chapter Four presents ERA's Vision, Mission, Core Values and Strategic Themes that will form the core of ERA's focus over the next ten years. Chapter Five presents the Strategic Objectives that ERA will pursue during the same period. The Balanced Scorecard complete with resource requirements is presented in Chapter Six. The last Chapter highlights the Monitoring and Evaluation Framework and critical success factors.



## 2.0 POLICY AND LEGAL FRAMEWORK

### 2.1 International Context

Energy plays an important role in the social and economic development of a country. In September 2011, the United Nations Secretary General launched the Sustainable Energy for All (SE4ALL) Initiative and shared his vision of how Governments, business and civil society, working in partnership, can make sustainable energy for all a reality by 2030. Uganda is one of the more than eighty Governments from developing countries that joined the SE4ALL initiative and expressed interest in advancing Sustainable Energy for All.

The Sustainable Energy for All Initiative aims at achieving three critical objectives, namely:-

- a) Ensuring universal access to modern energy services;
- b) Doubling the global rate of improvement in energy efficiency; and,
- c) Doubling the share of renewable energy in the global energy mix.


During the next ten years, ERA will play a key role in Uganda's drive to achieve the objectives of the Sustainable Energy for All Initiative. This will be mainly through establishing a stable, predictable and effective regulatory regime that will guarantee minimization of the perceived risks in the sector, improved technical and commercial performance of utilities and provision of incentives for exploitation of all least cost generation resources.

### 2.2 Regional Context

Infrastructure development is one of the four core development integration agenda of the Common Market for Eastern and Southern Africa (COMESA). The main focus of COMESA's energy strategy is joint development and pooling of energy resources with the objective to optimize intra-COMESA production and trade in commercial energy products. In this respect, emphasis is on joint exploration, exploitation and conversion of the energy resources of the sub-region such as wood-fuel, fossil, oil, hydropower, coal, geothermal, biomass and solar energy.

The East African Community (EAC) aims to increase economic, political and social co-operation among the Partner States. Energy and infrastructure are two of the major areas being promoted by the EAC. They are seen as key to facilitating social and economic development and the integration process of the Partner States. The EAC recognizes that availability of sufficient, reliable and affordable energy is crucial for the functioning of the economies of the EAC Partner States. Energy supply and energy access have, therefore, been integrated into the EAC Development Strategy, the focus of which is the supply of sufficient, reliable, cost effective and environmentally friendly energy through promotion of both renewable and non-renewable energy sources. This is aimed at facilitating the broader EAC objectives of attracting investments, competitiveness and trade for the mutual benefit of East Africans.

The East African Power Pool (EAPP) represents a regional policy initiative on optimal exploitation of energy resources in the region spread among ten countries, namely,



Burundi, Democratic Republic of Congo, Egypt, Ethiopia, Libya, Kenya, Rwanda, Sudan, Tanzania and Uganda. Its mission is to facilitate and secure power supply to the countries of the Eastern African region at the lowest possible cost. This will be achieved through:-

- (a) Pooling of resources for optimal exploitation of the available potential in the region to satisfy the increasing demands based on regional least cost options to benefit all member states; and,
- (b) Facilitation and coordination of power exchange among member utilities with the ultimate objective of establishing a regional electricity market.

Power pool policy coordination will be important during the next ten years to ensure that (a) power generation and interconnection projects are synchronously planned in the region to ensure inter-connectivity of the national power systems and (b) a common Grid Code is developed to facilitate the integrated development and operations of the power systems of the EAPP member states.

## **2.3 National Context**

### **2.3.1 Uganda Vision 2040**


Uganda's Vision 2040, which has been adopted as the country's economic development driver for the period 2013-2040, is 'A transformed Ugandan society from a peasant to a modern and prosperous country within thirty years'. This will involve changing from a predominantly low income to a competitive upper middle income country with per capita income of United States Dollars 9,500 by 2040.

With specific reference to the energy sector, Vision 2040 recognizes that energy and in particular electricity is a key driver of socio-economic transformation of a nation. For Uganda to shift from a peasantry to an industrialized and largely urban society, it must be propelled by electricity as a form of modern energy hence the need to develop and generate modern energy to drive the industry and service sectors. Vision 2040 envisages that Uganda will require 41,738MW by 2040 thus increasing its electricity consumption per capita to 3,668kWh. It further highlights the need to increase access to the national grid to 80%.

Whereas Vision 2040 states that the required capacity will be generated from different energy sources namely hydropower, geothermal, nuclear, solar, biomass, peat and thermal, Government recognises the need to emphasize use of energy sources that will provide a competitive tariff compared to other countries.

The Vision further recognizes that due to climate change, in addition to hydropower, emphasis will be on other renewable forms of energy including wind, solar and biomass. In this respect, Government has committed to invest in Research and Development and to provide incentives to encourage use of renewable energy. Government is also committed to support upgrading of industrial technologies to less energy consuming technologies.

To improve access and availability of electricity to the rural and urban areas, especially to economic zones and other productive areas, new transmission lines to evacuate power will be built and rural electrification programmes accelerated. Government further recognizes the need for regional power trading.



Overall, to achieve Uganda's development agenda and meaningful economic growth, Vision 2040 has identified quality, reliable and affordable energy services as critical infrastructure drivers. In order to support the envisioned economic and social development, ERA will maintain a robust regulatory framework that will ensure prudent and sustainable resource development and management with a view to guarantee quality, cost effective and reliable electricity services. The Authority's focus will be on incentive-based regulation, least-cost generation development, competitive pricing of electricity, network infrastructure upgrade and expansion, improving quality of supply and service, energy efficiency and demand side management and environmental conservation in order to facilitate attainment of the Country's vision.

### **2.3.2 National Development Plan, 2010/11 – 2014/15**

Consistent with Vision 2040, the theme of the five-year National Development Plan (NDP) covering the period 2010/11 – 2014/15 is 'Growth, Employment and Socio-Economic Transformation for Prosperity'. To achieve the NDP theme, the following strategic objectives were identified:-

- a) Increasing household incomes and promoting equity.
- b) Enhancing the availability and quality of gainful employment.
- c) Improving stock and quality of economic infrastructure.
- d) Increasing access to quality social services.
- e) Promoting science, technology, innovation and ICT to enhance competitiveness.
- f) Enhancing human capital development.
- g) Strengthening good governance, defence and security.
- h) Promoting a sustainable population and use of the environment and natural resources.

Uganda's energy sector is highlighted as one of the complementary sectors, alongside water, transport, trade and financial services, that is expected to provide institutional and infrastructural support to primary growth and other sectors. The NDP envisages that Uganda will require 8,601MW by 2020, 14,670MW by 2025 and 41,738MW by 2040.

The NDP emphasizes the need for radical and drastic action to step up electricity supply to drive the economy to the indicators comparable to middle income countries like Malaysia and Korea.

The five-year national plan takes cognizance of a number of key constraints attributed to the low performance of the energy sector in the past. These included:-

- i) Low lake water levels, arising from poor management of the catchments and the low level of regional cooperation in the management of shared water resources.
- ii) Limited institutional capacity of water resource institutions in terms of planning, coordination, monitoring and regulation.
- iii) Limited skilled human resource in water resources management.

- iv) Weak regulation and enforcement.
- v) Short term and uncoordinated institutional planning.
- vi) Weak private sector which is required to play an increasing role in the energy sector.
- vii) High investment capital and limited financing options for energy projects.
- viii) Poor regulation of public-private partnerships.
- ix) Lack of implementation of the national land use policy that has led to haphazard land utilization including rapid destruction of tree cover.
- x) High power losses (commercial and technical losses).
- xi) High power tariffs.
- xii) Limited power transmission and distribution network which limits access to power.
- xiii) Limited generation capacity.

Objectives, strategies and interventions were enlisted in the NDP to address these constraints. Whilst some of the defined interventions/initiatives have already been implemented, recognition is made of the fact that there is need to carry them forward but also to introduce other initiatives that will facilitate socio-economic transformation. Table 1 presents the strategic implications to ERA of energy sector objectives and strategies contained in the NDP.

**Table 1: Strategic Implications of NDP Energy Sector Objectives and Planned Interventions**

	Objective	Strategies in the NDP	ERA Strategic Implications
1	Increase power generation capacity.	Construct large hydropower plants and thermal power plants through public and private investments.	<ul style="list-style-type: none"> <li>Promote least-cost generation.</li> <li>Enhance capacity to regulate PPPs.</li> <li>Develop construction standards.</li> <li>Promote coordinated system planning, in particular transmission &amp; distribution planning both nationally and regionally.</li> <li>Propose appropriate policies for cross-border electrification and power trading.</li> </ul>
		Develop mini hydro power plants to generate 150MW.	<ul style="list-style-type: none"> <li>Develop strategies to promote/accelerate renewable energy generation.</li> <li>Develop construction standards.</li> <li>Enhance compliance monitoring.</li> <li>Advise on establishment of an appropriate policy for trans-boundary project developments.</li> </ul>





2	Build new transmission lines to evacuate new generation plants and extend network to improve power service delivery to different areas of the country.	Expand the transmission grid from the current 1,300km to 2,750km and increase transmission voltage from the current 132KV to cover 220KV and 400KV.	<ul style="list-style-type: none"> <li>Enhance electricity system planning.</li> <li>Operationalize investment approval and verification guidelines.</li> <li>Develop standards for infrastructure in the industry.</li> <li>Expand the transmission grid.</li> <li>Coordinated system planning.</li> </ul>
3	Accelerate rural electrification	Expand the grid to the rural areas.	<ul style="list-style-type: none"> <li>Develop standards for distribution infrastructure.</li> <li>Develop strategies aimed at enhancing economic and financial viability of rural electricity grids.</li> <li>Monitor technical and financial performance of rural schemes.</li> <li>Develop appropriate policies and framework for economic regulation of distribution concessions, especially in light of the service territory framework defined by REA.</li> <li>Enhance co-ordination between REA &amp; ERA.</li> <li>Promote provision of safe, quality and reliable power supply in rural areas.</li> </ul>
4	Promote energy efficiency	Reduce power losses from 40 per cent to 16 per cent.	<ul style="list-style-type: none"> <li>Heighten monitoring and enforcement of compliance.</li> <li>Regularly monitor implementation of loss reduction measures.</li> <li>Conduct effective investment verification and approval.</li> <li>Develop standards for electrical infrastructure.</li> <li>Improve inter-agency co-ordination.</li> </ul>
5	Strengthen the policy, legal and institutional framework.	Regulate and monitor Energy Policies/Plans.	<ul style="list-style-type: none"> <li>Participate in development of policies on energy efficiency.</li> <li>Propose amendments to the Electricity Act.</li> </ul>

6	Promote renewable energy.	Promote and facilitate development and use of renewable energy technologies (biomass, solar, gasification technologies and stoves) at household and institutional level.	<ul style="list-style-type: none"> <li>• Introduce incentives to promote renewable energy development.</li> <li>• Enhance licensing regime to promote renewable energy investments.</li> <li>• Enhance institutional capacity to appraise projects, regulate new generation and Public Private Partnerships.</li> <li>• Carry out resource mapping.</li> </ul>
		Promote and facilitate the use of bio fuels.	
		Invest in power generation from wind.	
		Promote development of co-generation for power production.	
7	Promote and regulate peaceful application of atomic energy.	Carry out specialized training of human resource in nuclear energy.	<ul style="list-style-type: none"> <li>• Build capacity to regulate electricity production from atomic energy.</li> </ul>
8	Build capacity in the energy sector.	Strengthen the institutional and human capacity.	<ul style="list-style-type: none"> <li>• Align ERA's business needs over the ten-year period to human resource requirements.</li> <li>• Enhance human capital development.</li> </ul>

### 2.3.3 Rural Electrification Strategy and Plan 2013– 2022

Government of Uganda approved the Rural Electrification Strategy and Plan (RESP) covering the period 2013 to 2022. The overall objective of the RESP is “To position the electrification development program on a path that will progressively advance towards achievement of universal electrification by the year 2040, consistent with the existing policy of the Government, while ensuring the displacement of kerosene lighting in all rural Ugandan homes by 2030”. The RESP targets to achieve 22% rural electrification rate (i.e. consumers who will be utilizing electricity in their homes, businesses or institutions) by 2022 from the current 5%. This will be achieved using long-range service territory plans and financial forecasts for the service territories under a logical, sequential allocation of investment and capacity-building resources. This will be met by electricity service expansion of 1.28 million of on-grid new service connections and 140,000 additional installations of solar photovoltaic (pv) systems and mini-grid distribution service connections for off-grids making a total of 1.42 million connections.

Based on the lessons learned from the past, the RESP identified policy measures that will be applied in undertaking the RESP 2013-2022. These include centralized renewable energy sector planning and management, introduction of service territories, promoting development of off-grid electricity services, adoption of uniform standards, capacity building initiatives and regulatory reform.



In view of these policy measures, Electricity Regulatory Authority will design an appropriate regulatory framework that will support attainment of increased access to electricity.

#### **2.3.4 Energy Policy and Electricity Act 1999**

Development of the energy sector is guided by the Energy Policy which was developed in September 2002. The main policy goal in the energy sector is “To meet the energy needs of Uganda's population for social and economic development in an environmentally sustainable manner”. The Ministry of Energy and Mineral Development (MEMD) is responsible for the energy sector, dealing specifically with energy policy formulation, implementation and monitoring.

The Electricity Act is the primary law under which ERA was established in 1999. The Act provides for ERA's functions, powers and administration. ERA has developed a number of electricity regulations and guidelines which serve to guide the implementation of its mandate.



## 3.0 SITUATIONAL ANALYSIS

### 3.1 The Electricity Supply Industry

The performance of the electricity supply industry has steadily improved during the last ten years with more private sector participation and Government investment. There has been an increase in generation capacity from an installed capacity of 380MW in 2003 to 852MW in 2013. The capacity increase was occasioned by commissioning of five small hydropower projects, addition of co-generation capacity from sugar producing companies, commissioning of the 250MW Bujagali hydropower plant in 2012 and establishment of two heavy-fuel oil based plants. The transmission network has increased from 1,165km in 2003 to 1,626km in 2013, the main addition being the Bujagali interconnection line. On the distribution side, we have witnessed an increase in the number of distribution utilities to nine from a single utility at the time of unbundling. Energy sales have more than doubled from 1,038GWh in 2003 to 2,118GWh in 2013. A segmented analysis of the electricity supply industry performance is presented below.

#### 3.1.1 Power Generation


The commissioning of the 250MW Bujagali hydropower station in 2012 provided the much needed relief from expensive sources of generation and also eliminated load shedding. Currently, Uganda is enjoying more stable electricity supply which is provided from large and mini hydropower resources and co-generation plants. The existing supply from renewable energy sources is sufficient to meet the current demand. We have reserve capacity of 100MW from two heavy fuel oil-based plants, one in Tororo and the other in Namanve. However, we recognize that this is expensive generation which must be dispatched only as a last resort, as demand continues to grow.

With the growing demand for electricity, estimated between 10-12% per annum in the short to medium term, Electricity Regulatory Authority (ERA) will continue to focus the regulatory thrust on expansion of generation capacity, with corresponding investment in transmission and distribution infrastructure. Recognition is made of the fact that the developments in Uganda's oil industry are likely to trigger significant industrialization and hence substantial increase in electricity demand in the medium to long term. ERA will therefore remain alert to these developments and will adjust the demand assumptions and electricity generation targets in this Plan accordingly when this materializes.

A number of programmes and projects are currently being implemented to ensure adequate supply capacity. These include the following:-

##### a) Small Renewable Energy Projects

Over the last decade, there has been a drive to promote renewable energy generation. ERA, working with other Government Agencies and Development Partners, established an initiative (Global Energy Transfer for Feed-in-Tariffs (GETFIT)) to accelerate renewable energy development including hydropower, solar, wind and biomass technologies.



This initiative provides a top-up premium in the range of 0.5-2.0 US cents per kilowatt hour on the Renewable Energy Feed-in-Tariff (REFIT). It also avails a guarantee scheme to enhance the bankability of the projects. The first tranche of projects with a cumulative generation capacity of 150MW is being targeted to be brought into production within the next three years. The initiative is aimed at bridging the generation gap likely to occur between 2015 and 2018 before commissioning of the next large hydropower plants. In order to accelerate the licensing process, ERA developed standardized Power Purchase Agreements, Implementation Agreements and License for small hydropower and bagasse co-generation technologies.

During this planning horizon, the nature of the regulatory framework will be mainly influenced by the cost of additional electricity generation. ERA will establish a robust regulatory framework that emphasizes use of energy sources that will provide a competitive tariff compared to other countries, hence the need for extensive least cost generation planning.

#### **b) Large Hydropower Development**

Government of Uganda (GOU) is committed to undertake large hydropower development under Public Private Partnership financing arrangement. The construction of the 600MW Karuma hydropower plant is underway. Development of the 183MW Isimba hydropower project is also in progress. Government will continue to develop other large hydropower projects such as Ayago and Oriang along the River Nile, as well as small non-Nile hydropower projects such as Muzizi and Nyagak III.

Much of the regulatory effort will be directed towards regulation and management of projects undertaken on a Public Private Partnership basis, compliance to regulatory requirements, maintenance and replacement of ageing generation plants, implementation of cross-border generation projects and evacuation of capacity from remote sources.


### **3.1.2 Power Transmission**

The current industry structure "the Single Buyer Model" provides for Uganda Electricity Transmission Company Limited (UETCL) performing four functions of system operation, management and operation of the high voltage network, bulk supply and export and import of electricity. This model has operated reasonably well to date, but there are proposals to modify it. ERA has adopted the Multi-Year Tariff regime for Uganda Electricity Transmission Company Limited (UETCL) in order to create incentives for improving efficiency.

The transmission grid does not cover the entire country. Various initiatives are being implemented to upgrade, extend and reinforce the transmission grid. It is planned that the transmission grid will double by 2017. This will enhance the transmission capacity to support future electricity delivery by:-

- i) Increasing transmission capability to contribute to reliable electricity supply that will provide greater access to economically priced power.



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- ii) Enabling evacuation of generation capacity from renewable resources which are more often than not located in remote areas.
  - iii) Facilitating regional interconnections with neighbouring countries in order to ensure efficient utilization of resources available within the region.

The transmission grid plays an important role in evacuation of generation plants and delivery of energy to distribution companies. Delays in the scheduled commissioning of transmission lines and associated sub-stations is a major risk to the industry. Therefore, comprehensive power sector planning and co-ordination will form the main focus for the industry in the next ten years.


Optimal utilization and sharing of energy resources will be key during this planning horizon. Cross-border electricity trading and power pooling within East Africa have started gaining momentum. Uganda will need to position herself strategically in order to benefit from these regional opportunities. This will require implementation of strategic initiatives aimed at influencing enactment of new policies, harmonization of legislative and regulatory frameworks, development of uniform standards for electrical infrastructure, investment in upgrading and extension of both national and regional transmission infrastructure, engagement in activities of regional energy regulatory associations and establishing and maintaining strategic partnerships and dialogue with neighbouring countries.

### 3.1.3 Electricity Distribution

Government policy for the distribution segment is to promote competition, improve efficiency and increase access to electricity. There are currently nine distribution companies operating in Uganda, namely, Umeme Limited, Ferdsult Engineering Services Ltd, Bundibugyo Electricity Cooperative Society (BECS), Pader-Abim Community Multi-Purpose Electric Co-operative Society Limited (PACMECS), Kilembe Investments Limited (KIL), Uganda Electricity Distribution Company Limited (UEDCL), Kyegegwa Rural Energy Cooperative Society (KRECS), West Nile Rural Electrification Company Limited (WENRECO) and Kalangala Infrastructure Services (KIS).

The distribution segment has registered considerable progress since the reforms including:-

- i) Licensing of nine distribution utilities;
- ii) Reduction in distribution losses from 38% in 2005 to 23.4% in 2013;
- iii) Improvement in the quality of service and supply;
- iv) Increased investment in the segment;
- v) Increase in customer numbers from 180,000 in 2000 to 583,000 in 2013;
- vi) Improvement in collection rates from 79.6% in 2004 to 95.8% in 2013;
- vii) Introduction of pre-paid metering;
- viii) Increase in energy sales from 1,038GWh in 2003 to 2,118GWh in 2013; and
- ix) Increased access from 8% in 2000 to 14% in 2013.



While recognizing the above achievements, there is need to address the following aspects going forward:-

- i) Network coverage and access;
- ii) Expansion and refurbishment of the distribution infrastructure;
- iii) Technical and non-technical losses;
- iv) Quality of electricity supply and service;
- v) Theft and vandalism of electrical infrastructure;
- vi) Enforcement of standards for distribution infrastructure;
- vii) Long term sustainability of the distribution segment; and,
- viii) Competition in the distribution segment.

Effective performance of distribution companies is critical to the overall industry performance. During this planning horizon, significant investments will be required in electricity distribution. This will call for both Government and private sector efforts.

It is important to recognize that consumer demand for energy can be managed to improve distribution efficiency hence the need for Demand Side Management (DSM) efforts. The goal of DSM is to encourage consumers to use less energy during peak hours, or to move the time of energy use to off-peak times. An increased focus on energy efficiency initiatives and development and implementation of demand side management measures will be important in meeting Uganda's growing demand for electricity, given their cost-effective and sustainability benefits. In this respect, ERA will continue coordinating with distribution utilities and other stakeholders to develop and implement a comprehensive demand side management and energy efficiency programme.

The global community is involved in the collective responsibility and management of global ecological issues, that is, climate change and biodiversity. Uganda is a signatory and has ratified several international agreements relating to the environment, namely:-

- i) World Heritage Convention;
- ii) Convention on Biological Diversity;
- iii) Convention on the Conservation of Migratory Species of Wild Animals;
- iv) Convention on Wetlands of International Importance (Ramsar);
- v) African Convention on the Conservation of Nature and Natural Resources (1968);
- vi) Protocol Agreement on the Conservation of Common Natural Resources (1982);
- vii) Convention for the Protection of the Ozone Layer (Montreal Protocol);
- viii) Convention on the Control of Trans-Boundary Movements of Hazardous Wastes at their Disposal (Basel Convention); and,
- ix) Framework Convention on Climate Change – United Nations (Kyoto Protocol).



In view of the various environmental protocols and agreements which Uganda has ratified, ERA will mainstream the relevant provisions into regulatory activities.

One of the key objectives of Government is to increase access to electricity. To this effect, Government of Uganda approved the Rural Electrification Strategy and Plan whose ultimate objective is to ensure universal access to electricity by 2040. In the medium term, Government strategy is to achieve a rural electrification access of 22% by 2022 from the current level of about 5%. Up until 2014, the rural electrification model provided for grid extension and establishment of distribution concessions in areas which are not connected to the national grid. Whilst this was a good initiative, the framework presented various challenges, namely, poor quality of electricity supply and service, lack of technical capacity to manage the concessions, low connection rates and resultant high electricity tariffs in the rural areas. These issues rendered the concessions economically and financially not viable. We recognize that the new model of rural electrification hinged on service territories is designed to improve viability of these rural schemes and promote access. This places a challenge on ERA as an enabling regulatory environment will need to be maintained during this period to facilitate achievement of these rural electrification goals. ERA will therefore establish an appropriate economic framework for regulation of these service territories that will facilitate attainment of Uganda's development agenda of spurring economic growth.

In addition to this, in order to transform lives, emphasis will be placed on upgrading and expanding the grid foot print in the country so as to achieve the access targets envisioned in the national strategy. This will require substantial investments.

Appropriate strategic responses to the distribution network challenges discussed in this section have been identified and listed for implementation, details of which are contained in Annex A.

### 3.2 External Environment

ERA reviewed external factors that may impact on the execution of the regulatory mandate. The factors analyzed include the following:-

- i) Political and Legal – Laws, global issues, legislation and regulations which may have an effect on ERA's mandate either immediately or in the future.
- ii) Economic – Macro economic factors including taxes, interest rates, inflation, the stock markets and consumer confidence.
- iii) Social – The changes in lifestyle and buying trends, media, major events, ethics, advertising and publicity factors.
- iv) Technological – Innovations, access to technology, licensing and patents, manufacturing, research funding and global communications.
- v) Environmental – Environmental issues either locally or globally and their associated social and political factors.

Details of the specific factors considered in the external environmental scan, complete with ERA's response to the challenges, are presented in Table 2.

**Table 2: Political, Legal, Economic, Social, Technological and Environmental Analysis**

Political and Legal Factors	ERA's Response to the Challenge
1. Lack of adequate sanctions in the Electricity Act and other inadequacies in the legal framework	<ul style="list-style-type: none"> <li>• Support the conclusion of amendment of the Electricity Act</li> <li>• Provide input into policy development and review</li> </ul>
2. Non-compliance with regulatory requirements, such as reporting on legal, engineering, environment, economic and financial aspects	<ul style="list-style-type: none"> <li>• Enforce compliance to the proposed sanctions in the Electricity Act, Regulations and Licenses</li> </ul>
3. Challenges of developing trans-boundary projects	<ul style="list-style-type: none"> <li>• Advise on establishment of an appropriate policy framework for trans-boundary projects</li> </ul>
Economic Factors	ERA's Response to the Challenge
1. Volatility of inflation and exchange rates	<ul style="list-style-type: none"> <li>• Flexible Tariff Adjustment mechanism</li> <li>• Structure the payment terms in the PPA in local currency</li> </ul>
2. Different pricing policies in neighbouring countries, such as provision of Government subsidies to end-users	<ul style="list-style-type: none"> <li>• Support establishment of a uniform pricing regime within the region that will promote sector financial sustainability</li> </ul>
3. Potential imbalance between supply and demand	<ul style="list-style-type: none"> <li>• Fast-track development of projects that have qualified for GETFIT support</li> <li>• Fast-track implementation of solar photovoltaic and other renewable energy projects</li> </ul>
4. Discovery of oil and gas in the Albertine region	<ul style="list-style-type: none"> <li>• Promote electricity generation from natural gas</li> <li>• Advise Government on the need for fair pricing of local gas and crude oil resources</li> <li>• Maintain a regulatory framework that is responsive to substantial increase in electricity demand, triggered by developments in Uganda's oil industry</li> </ul>
5. Treatment of debt service for Government-funded projects	<ul style="list-style-type: none"> <li>• Engage Government for clarity on treatment of debt for Government-funded projects</li> </ul>
Social Factors	ERA's Response to the Challenge
1. Resentment of the public to tariff increases	<ul style="list-style-type: none"> <li>• Enhanced consumer education</li> <li>• Effective public consultation</li> <li>• Effective stakeholder engagement</li> <li>• Mediation</li> </ul>



2. Vandalism of electrical infrastructure	<ul style="list-style-type: none"> <li>• Consumer education about dangers associated with vandalism</li> <li>• Engage local area political leadership and advocate for community policing</li> <li>• Propose amendments to the law to include punitive sanctions</li> </ul>
3. Non-technical losses	<ul style="list-style-type: none"> <li>• Enhanced consumer education</li> <li>• Ensure that Licensees enact measures to curb non-technical losses</li> </ul>
Technological Factors	ERA's Response to the Challenge
1. New technology employed in loss reduction programmes	<ul style="list-style-type: none"> <li>• Continuous capacity building of ERA staff in order to cope with emerging industry trends</li> </ul>
2. Inaccurate electrical equipment	<ul style="list-style-type: none"> <li>• Partner with UNBS to ensure importation and use of certified electrical equipment</li> </ul>
3. Introduction of solar pv generation technology in the energy mix	<ul style="list-style-type: none"> <li>• Facilitate research and acquisition of relevant technical skills to regulate solar pv technology</li> </ul>
4. Prospected power generation from nuclear	<ul style="list-style-type: none"> <li>• Build internal technical capacity to regulate power generated from nuclear sources</li> </ul>
Environmental Factors	ERA's Response to the Challenge
1. Increasing awareness/ expectations by the public on environmental matters especially with regard to environmental protection	<ul style="list-style-type: none"> <li>• Enhance collaboration with NEMA &amp; DWRM to ensure compliance to environmental guidelines</li> </ul>
2. Climate change and pollution	<ul style="list-style-type: none"> <li>• Mainstream these issues into the licensing framework</li> </ul>
3. Protected areas and international treaties	<ul style="list-style-type: none"> <li>• Partner with lead agencies on environmental matters</li> </ul>
4. Delays in issuing Environmental Impact Assessment Certificates	<ul style="list-style-type: none"> <li>• Develop stronger partnership with NEMA</li> </ul>

### 3.3 Internal Environment

Analysis of ERA's organizational issues was carried out in order to identify the strengths that the institution must leverage on and the weaknesses that will be addressed in order to ensure successful implementation of the ten-year Strategic Plan. The areas of analysis include people, resources and processes. Table 3 presents the organizational challenges and mitigation strategies.



**Table 3: Analysis of Organizational Issues**

Organizational issue	Challenge posed by the factor	Strength presented by the factor	ERA's Response to the challenge
People	Challenge of retaining requisite skills	Highly qualified and experienced staff complement	<ul style="list-style-type: none"> <li>Conduct staff satisfaction survey</li> <li>Establish a staff retention plan</li> </ul>
Resources	Pressure on office space	Increase in staffing has improved operational efficiency	<ul style="list-style-type: none"> <li>ERA will acquire larger office premises</li> </ul>
	Challenge of inadequate financial base	Financial independence – progressive increase in revenue generated from license fees and levy charges owing to a wider licensee base	<ul style="list-style-type: none"> <li>ERA will explore various options to increase the revenue base</li> </ul>
Processes	Compliance to internal systems and procedures	Various systems and procedures are in place	<ul style="list-style-type: none"> <li>Enhance the internal audit function</li> <li>Embark on the ISO Certification process</li> </ul>

### 3.4 Stakeholder Expectations and Aspirations Analysis

During the preparation of this Strategic Plan, ERA consulted various categories of stakeholders in order to obtain their anticipations and expectations of ERA. Table 4 presents the aspirations of the various stakeholder categories.

**Table 4: Stakeholder Expectations and Aspirations**

SN	Stakeholder	Aspirations and Expectations	Strategic Implication
1	Government of Uganda	Effective regulation of the electricity supply industry	<ul style="list-style-type: none"> <li>Maintain a robust and effective regulatory framework</li> <li>Carry out regulatory impact assessments on a regular basis</li> </ul>
		Promotion of investment in the electricity sector	<ul style="list-style-type: none"> <li>Enhance licensing framework and establish investment incentives</li> </ul>
		Ensure compliance to performance standards by Licensed entities	<ul style="list-style-type: none"> <li>Enhance monitoring of Licensees' performance</li> </ul>
		Affordable electricity supply	<ul style="list-style-type: none"> <li>Promote least cost generation development</li> </ul>
		Quality and reliable electricity supply	<ul style="list-style-type: none"> <li>Establish regulatory framework that promotes delivery of quality and reliable electricity supply</li> </ul>



SN	Stakeholder	Aspirations and Expectations	Strategic Implication
2	Operators in the electricity supply industry	Stronger co-ordination between ERA and ESI players	<ul style="list-style-type: none"> <li>Effective co-ordination with sector players</li> </ul>
		Harmonization of the regulatory regime with project implementation modalities of Government projects, i.e., REA and UETCL projects	<ul style="list-style-type: none"> <li>Greater co-ordination with relevant Government agencies</li> </ul>
		User-friendly regulatory compliance policies and procedures	<ul style="list-style-type: none"> <li>Rationalize regulatory systems, policies and procedures and put in place mechanisms for sharing information and engagement</li> </ul>
		Advocate for supportive power investment policy incentive regime	<ul style="list-style-type: none"> <li>Develop and implement a strong investment incentive advocacy program in consultation with Uganda Investment Authority</li> <li>Develop effective mechanisms for engagement with ESI players and consultations with clients/ utilities</li> </ul>
		Increased operational efficiency	<ul style="list-style-type: none"> <li>Acquire Regulatory Information Management System and improve internal efficiency</li> </ul>
3	Public	Affordable electricity	<ul style="list-style-type: none"> <li>Enhanced verification of investments</li> </ul>
		Quality, safe and reliable electricity supply	<ul style="list-style-type: none"> <li>Prioritize monitoring compliance to laws, regulations and license conditions</li> </ul>
		Better service from electricity providers	<ul style="list-style-type: none"> <li>Ensure that Licensees focus on improving quality of service</li> </ul>
		Increased public awareness of ERA	<ul style="list-style-type: none"> <li>Promote visibility of ERA through development of effective mechanisms for engagement with ESI players and the public</li> </ul>



SN	Stakeholder	Aspirations and Expectations	Strategic Implication
4	Collaborating regulatory and oversight agencies e.g. NEMA, MWE, UBOS, UIA, NPA, MEMD, MoFPED, etc	Reliable information base on available investment opportunities in the energy sector in consultation with collaborating agencies	<ul style="list-style-type: none"> <li>Enhance collaboration framework with agencies</li> <li>Maintain an up-to-date website</li> </ul>
		Better management of hydropower resources in liaison with MWE	<ul style="list-style-type: none"> <li>Enhance collaboration framework with agencies</li> </ul>
		Improved water catchment management	<ul style="list-style-type: none"> <li>Streamline catchment management aspects in ERA's licensing processes</li> </ul>
		Close liaison with MoFPED on issues related to sector financing	<ul style="list-style-type: none"> <li>Enhanced co-ordination</li> </ul>
		Regular provision of reliable information and data on the electricity sector so as to facilitate national planning	<ul style="list-style-type: none"> <li>Enhanced co-ordination</li> </ul>
5	Development Partners / Donors	International best practice in electricity sector regulation and development	<ul style="list-style-type: none"> <li>Establish strong regulatory framework that promotes transparency and accountability</li> <li>Review regulations, standards and develop guidelines to enhance affordable connectivity</li> <li>Enhanced regulation of projects undertaken on PPP basis</li> </ul>
		Sustained, secure and safe electricity supply.	<ul style="list-style-type: none"> <li>Coordinated system planning</li> <li>Performance and standards monitoring to ensure reliable and safe electricity supply</li> </ul>



SN	Stakeholder	Aspirations and Expectations	Strategic Implication
6	Regional and International Collaborating Agencies	Share information on power sector developments and best regulatory practices in cross border/regional power pool trading	<ul style="list-style-type: none"> <li>Information exchange and benchmarking in order to promote international best practice</li> <li>Establish, operationalize and coordinate regulatory framework for cross border/regional power pool trading</li> <li>Establish mechanism for joint regulatory actions with a view to enhance cost-effectiveness and efficiency especially at a regional level (EAC)</li> </ul>
7	The Authority	Enhanced visibility of ERA	<ul style="list-style-type: none"> <li>Effective stakeholder engagement mechanisms</li> </ul>
		Enhanced institutional capacity	<ul style="list-style-type: none"> <li>Continuous review of Human Resource policies and structures with a view to align the structure with the business needs</li> </ul>
		Sustainability of ERA	<ul style="list-style-type: none"> <li>Explore ways of increasing ERA's revenue base</li> </ul>
		Effective, efficient and robust regulatory framework	<ul style="list-style-type: none"> <li>Carry out regulatory impact assessments on a regular basis</li> </ul>
8	ERA Secretariat	Continuous improvement in human resource management and development policies and procedures	<ul style="list-style-type: none"> <li>Regular review of Human Resource Manual and staff emolument scheme to sustain competitiveness</li> <li>Capacity building</li> </ul>
		Adequate infrastructure, facilities, equipment and materials to execute the Authority's functions	<ul style="list-style-type: none"> <li>Regular upgrade of institutional facilities and equipment to match the regulatory demands of the ESI</li> </ul>

The above stakeholder expectations and aspirations have been taken into account in the development of this strategy.

## 4.0 HIGH LEVEL STATEMENTS AND THEMATIC AREAS

### 4.1 Vision

ERA's Vision is:- "To be an effective regulator that promotes safe, efficient, reliable and sustainable electricity supply".

### 4.2 Mission

ERA's Mission is:- "To regulate the electricity industry in accordance with applicable laws, policies, standards and international best practice".

### 4.3 Core Values

Core values are fundamental beliefs of an organization which define the code of conduct, standards of behaviour and provide ethical guidelines for decision-making. In this process ERA reflected on our core values and decided we need a renewed core value base with a brief explanation of each as shown in Table 5:-

**Table 5: ERA's Core Values**

Core Value	Description
Professionalism	We are dedicated to quality, timeliness and excellence in our service and live up to the commitments we set. We perform our tasks and deliver our outputs to the best of our ability with a focus on continuously improving quality, productivity and professional development.
Integrity	We are honest and adhere to moral and ethical principles.
Innovation	We are creative in delivering value to our stakeholders. As a learning organization, we believe in continuous improvement, promote and reward creativity and adapt new ways of doing things.
Transparency and Accountability	We are clear and open while exercising our mandate. We serve the needs of our stakeholders in a responsible manner and recognize our obligation to bear consequences of our actions and decisions.
Equal and Fair Opportunity	We conduct our functions and duties in ways that are just, unbiased and non-discriminatory.
Stakeholder Sensitivity	In arriving at decisions, we endeavour to strike a balance and recognise the interests, expectations and aspirations of various stakeholders in the electricity industry. We therefore continually seek to identify, understand and respond to the legitimate interests and concerns of our stakeholders as the basis for sustaining mutually beneficial and respectable operational relations.
Teamwork	We embrace togetherness, promote and support a diverse, yet unified, team. We believe in partnerships and collaboration while maintaining individual accountability. We combine resources, competences, skills and work as a team in pursuit of the Vision.

The short form that has been adopted for our core values is PITEST.



## 4.4 Strategic Themes

Four key strategic themes have been identified, which, taken together frame the direction of our Strategic Plan for the next ten years.

### 4.4.1 Power Supply Security and Sustainability of the ESI

Power supply security is achieved when there is uninterrupted availability of electricity which is affordable while respecting environmental concerns. In the context of the electricity industry, sustainability is the ability to meet electricity requirements from diverse energy sources at competitive prices in the short and long term.


During this Strategic Planning period, ERA will plan for a generation mix that not only considers the cost and availability of generation resources in Uganda, but also considers the appropriate plant availability (sufficient reserve margin), reliability (minimal supply interruption frequency), diversity of the generation mix (risk mitigation) and due regard for the environment (renewable energy). Diversity of resource is important for affordable and reliable electricity as it protects utilities and consumers from any contingencies. A diverse generation mix will also ensure energy security.

ERA will maintain a regulatory framework which will provide incentives and financial mechanisms for promoting investment in alternative renewable energy sources. Promotion of generation of electricity from renewable sources, with particular emphasis on solar, wind, biomass, geothermal and co-generation, will be emphasized.

There is an increasing awareness that addressing environmental challenges is important in sustainable development. The effects of climate change have resulted in significant challenges, many of which lie in national and international arenas, including: pricing of fossil fuels to reflect carbon content, assessing and delivering the optimal mix of power generation, increasingly aggressive targets for the share of renewable energy in electricity generation and technical implications of significantly enhanced renewable energy production, notably solar and wind power, on the grid. The generation mix will take into account environmental and social issues to ensure that the exploitation of natural resources does not unduly burden the citizens of Uganda.

ERA will promote and advocate for efficiency in electricity supply and use at all stages of the supply/demand chain to eliminate unnecessary operating costs that are often passed on to the customer. This approach will further increase the availability of scarce energy resources for others to utilize, allowing increases in energy-dependent activities to contribute to the economic well-being of the Ugandan population as a whole. ERA will aim to achieve this by availing reliable electricity sector data and information, which will be disseminated in order to promote employment of energy efficient measures.

Further, we specifically recognise that implementation of various energy efficiency and demand side management measures has the potential to reduce the electricity supply-demand gap. ERA will promote the adoption of best energy efficiency technologies and practices among service providers and users of energy by means of regular audits. This will contribute to lowering the cost of energy which will increase access, increasing the return on investment for the investors in the energy sector and extend the life of the national energy reserves where existent.



The transmission and distribution segments will require significant resources for reinforcement and extension; it is our responsibility to ensure that this is done in a uniform and most economically efficient manner. ERA will continue to ensure that distribution utilities roll out Pre-payment metering technology in a cost effective and efficient manner.

In view of the increasing number of hydropower plants, ERA, working with the Ministry of Water and Environment, NEMA and other stakeholders will focus on improved catchment management by licensed entities of areas along river reaches.

ERA will implement Least Cost Generation Planning which will guide investment in the electricity sector, streamline the licensing regime with a view to making it more attractive for investment, and ensure competitive energy prices and tariffs that guarantee a return on investment while safeguarding the interest of consumers.

In order to guarantee security of supply while reducing the carbon footprint, ERA will advise on the need for appropriate policies and maintain a licensing regime that promotes cross-border electricity trading within the East African region.

#### **4.4.2 Electricity Industry Efficiency**

ERA recognises that the electricity industry structure is monopolistic in nature and does not fully protect consumers' rights, particularly in terms of placing downward pressures on costs and enhancing innovation and quality of service. As such, regulation of monopoly segments of the industry (distribution and transmission) will remain a key goal. ERA will ensure that the regulated monopolies act efficiently in delivering their services. In this planning period, significant effort will be devoted to regulating the costs and prices of the utilities and to ensure that they meet their license obligations at reasonable costs and with due regard to quality, environmental, safety, innovation and social requirements.

In the absence of a competitive environment, it is imperative that consumers have confidence in the enforcement of the set performance standards. Therefore ERA will continue to implement incentive-based regulation, enforce standards and develop and implement performance benchmarks.

Financing arrangements have implications on the cost of service. Given that many of the entities are privately financed, the cost of financing will be given due consideration to ensure optimal capital structures for investments in the industry. Due consideration will be devoted to cost structures and the extent to which the costs are segmented to arrive at an optimal cost of service.

Under this strategic theme, ERA will establish a dynamic tariff structure that delivers reasonable and fair prices of electricity; investigate tariff charges and periodically review the financial performance of Licensees to inform the reasonableness of performance targets.

Governance impacts on the operating efficiency of utilities. Therefore ERA will continuously evaluate the adequacy of the existing governance structures and prescribe best practice models of utility management.



### 4.4.3 Transparency and Accountability to Stakeholders

Balancing the interests of various stakeholders is critical in the execution of regulatory activities. To achieve this ERA will enhance transparency and accountability and conduct regulatory activities in a manner that is transparent, objective, reasonable and non-discriminatory. The decisions made and actions taken in performing the regulatory roles and other activities affect a wide range of individuals, businesses and organisations. ERA will improve the quality of stakeholder engagement including provision of accurate and timely information to stakeholders.

Effective performance of ERA is underpinned by the establishment of collaborative relationships across stakeholders including Government. Whilst ERA is an independent statutory organization, we recognize that we are accountable to Government and Parliament for use of resources in the performance of our functions, and the way in which we perform those functions. Thus, ERA will report regularly to Government as a form of accountability of the ERA's performance against agreed performance targets. Besides Government, ERA will remain accountable to Parliament, Licensees, consumers and the general public.


ERA will develop a stakeholder engagement framework to facilitate achievement of our mandate. The core objectives of the stakeholder engagement framework will be to:-

- a) increase the transparency of regulatory activities and processes, and increase stakeholder participation in these activities and processes;
- b) facilitate ERA's ability to understand stakeholder concerns and interests and incorporate them into regulatory processes, activities and decisions;
- c) improve communication and engagement with stakeholders, including enhancing the clarity, accessibility, relevance and timeliness of our communication throughout our engagement processes; and,
- d) build stakeholders' trust and confidence in the Authority and its regulatory processes, decisions and activities.

In order to improve the effectiveness of our engagement, we will provide information that is clear, accurate, relevant and timely, recognizing the different communication needs and preferences of different stakeholders. We shall achieve this by providing information in a form that is understandable by the target audience and in a way that assists people to understand and make informed choices and contributions to our processes.

ERA will seek out stakeholders potentially affected by, or interested in our activities, process or decisions and provide them with the information they need to participate in a meaningful way. While planning for any engagement activity, we will identify the relevant stakeholders that may be interested in, or affected by the issue and determine the most effective way to engage with these stakeholders. This will include considering which particular communication channels and engagement tools may be most effective. We will seek to understand the interests and concerns of the relevant stakeholders.

Evaluating our engagement activities is a critical element of good engagement as it will allow us to understand what is effective, and improve the quality of our stakeholder engagement over time. We will evaluate the effectiveness of each engagement activity



by obtaining stakeholder feedback, and use this information to refine and improve future engagement activities. ERA recognises that different levels of stakeholder engagement are appropriate depending on the objective, outcomes, timeframes, resources and levels of concern or interest in the project or issue. We shall adopt a Stakeholder Engagement Spectrum (inform-consult-involve-collaborate-empower) to illustrate the increasing levels of engagement we shall use depending on the particular subject or activity, and the different engagement methods that will accompany each level. The Spectrum will provide a methodology for us to determine what level of influence stakeholders can have over an activity and therefore what level of engagement is appropriate.

ERA is committed to being open and accessible to all stakeholders. We shall develop a Service Charter which will set out the standard of service excellence you can expect to receive from ERA when you make an enquiry or complaint. The Charter will provide clear guidance about regulatory requirements and timelines. This will build stakeholder confidence and, in turn, increase the level of voluntary compliance, which will ultimately reduce administrative costs for ERA and compliance costs for stakeholders.

Consumer protection and awareness of rights and obligations is key. ERA will develop a consumer service framework comprising Complaints Handling Policy, Consumer Protection Policy and Contact Centre Management Strategy.

#### **4.4.4 Operational Excellence**

Operational excellence is the cornerstone to effective performance of a regulator. This is embodied in its quality of governance, human capital and physical infrastructure including information technology (IT) facilities. Operational excellence entails systematic management of all processes, optimization of resources and elimination of inefficiencies.

ERA's governance framework sets out the relationships, structure, systems and processes that underpin the operations of ERA. The governance arrangements are reflected in the business planning framework, audit activities, risk management, fraud prevention and control, policies and guidelines and in the performance management frameworks that are in place. Therefore, ERA will continuously review and augment its governance arrangements to ensure that it maintains currency, reflecting the Government's policies and priorities and international best practice. ERA is also implementing a strong performance management system to allow for the monitoring, measurement and reporting on its regulatory performance. Standard operating procedures, strong internal controls and a risk-based approach to resource allocation are all measures which will be upheld in order to contribute to effectiveness. ERA is committed to the principle of continuous improvement to achieve reliable processes that reduce the risk of error and avoid multiple handling. ERA aspires to be certified and compliant to the International Standards Organization (ISO) 9001:2000. With the right systems, processes and procedures in place, ISO certification will boost efficiency and effectiveness of ERA. Specific strategies will be implemented by ERA during the Strategic Plan period to reach this target of ISO certification.

We shall continue to ensure financial viability and sustainability of ERA; endeavour to expand revenue sources to achieve adequate funding of our activities and continuously review control systems to cope with the dynamic risk environment.



ERA will predominantly rely on its human capital to effectively deliver this Strategic Plan. To this end, ERA will endeavor to build her human capital by ensuring that a full staff complement of appropriately qualified and experienced personnel is in place and that the staff is well equipped with appropriate tools and resources. The staff recruited will be developed and retained through implementation of a comprehensive human resource policy. ERA will further promote a corporate culture that enables effective and efficient service delivery in order to enhance its reputation and respect among the public. A learning culture, borne from continuous improvement, will be encouraged through continuous performance evaluation and implementation of appropriate performance improvement measures.

We will increase our investment in technology and promote awareness with the aim of attaining greater operational efficiency and for proper planning, knowledge management and decision making. We shall institute a regulatory information management system to facilitate more efficient regulatory processes and roll out E-Registry. We will improve website capabilities, introduce IT enhancements, develop and maintain sound organization infrastructure, namely buildings, furniture and fittings, motor vehicles and ICT infrastructure.

Strategic Results for each of the four strategic themes are shown in Table 6:-

**Table 6: Strategic Results**

**Strategic Theme:** Power Supply Security and Sustainability of the ESI

**Strategic Result:** Adequate electricity supply, for both present and future generations, that will enhance safety and spur sustainable socio-economic development.

**Strategic Theme:** Electricity Industry Efficiency

**Strategic Result:** Efficient and reliable electricity supply that will promote economic activity, growth and prosperity of Ugandans.

**Strategic Theme:** Transparency and Accountability to Stakeholders

**Strategic Result:** Improved understanding of ERA's mandate by stakeholders, improved public image, fair and balanced regulatory decisions.

**Strategic Theme:** Operational Excellence

**Strategic Result:** A highly motivated staff complement that executes its mandate in a timely, cost-effective and professional manner.



## 5.0 STRATEGIC OBJECTIVES

### 5.1 Strategic Objectives

Strategic objectives have been generated for each of the four themes identified above. These are listed in Table 7.

**Table 7: Strategic Objectives**

Theme	Strategic Objective
<b>Power Supply Security and Sustainability of the ESI</b>	<ol style="list-style-type: none"> <li>1. Increase electricity generation to meet present and future demand through attraction of both private and public sector investment and integration of environmental concerns.</li> <li>2. Promote energy efficiency and demand side management practices.</li> <li>3. Strengthen national and regional electricity transmission and distribution infrastructure and enhance regional collaboration in electricity regulation.</li> </ol>
<b>Electricity Industry Efficiency</b>	<ol style="list-style-type: none"> <li>4. Increase technical, commercial and operational efficiency in electricity generation, transmission and distribution.</li> <li>5. Promote reasonable and fair pricing of electricity services</li> </ol>
<b>Transparency and Accountability to Stakeholders</b>	<ol style="list-style-type: none"> <li>6. Promote objectivity, transparency and accountability to stakeholders.</li> </ol>
<b>Operational Excellence</b>	<ol style="list-style-type: none"> <li>7. Enhance good governance, internal operating efficiency and sustainability of ERA.</li> <li>8. Enhance human capital management.</li> <li>9. Improve use of technology and promote optimal utilization of organizational assets.</li> </ol>

### 5.2 Description of the Strategic Objectives

Table 8 presents a brief description of the Strategic Objectives.

**Table 8: Description of the Objectives**

<b>Objective 1</b>	<b>Increase electricity generation to meet present and future demand through attraction of both private and public sector investment and integration of environmental concerns</b>
Description	ERA will maintain an enabling regulatory framework that will attract investment in electricity generation by both Government and the private sector. This process will be initiated in consultation with Government, Development Partners and other stakeholders. ERA will develop and maintain a dynamic Least-Cost Generation Plan to guide resource development and integrate environmental and social concerns into all regulatory activities.



<b>Objective 2</b>	<b>Promote energy efficiency and demand side management practices</b>
Description	ERA will collaborate with other institutions (MEMD, Utilities, etc) to strengthen regulatory initiatives to support Energy Efficiency practices and Demand Side Management. This will involve development of a comprehensive Demand Side Management framework including an incentive mechanism for large electricity users to exploit time-of-use pricing signals and collaborating with the relevant authorities to advocate for enactment of laws that will incentivize consumers to implement energy efficient measures. These initiatives will go a long way in addressing the electricity supply-demand gap that is apparent in the short to medium term.
<b>Objective 3</b>	<b>Strengthen national and regional electricity transmission and distribution infrastructure and enhance regional collaboration in electricity regulation</b>
Description	<p>ERA will facilitate development of an adequate and robust transmission and distribution network infrastructure in the most economically efficient manner. Optimal and uniform network upgrade and extension calls for development of standards for electrical infrastructure and co-ordinated system planning.</p> <p>The on-going developments in electricity generation segments of the East African countries present an opportunity for power pooling and cross-border electricity trading. These are cost-effective means of securing electricity supply which Uganda should take advantage of during the next decade. ERA will establish and maintain strong co-operation with regional and international regulatory institutions so as to adopt best practice through information sharing, benchmarking and advocating for harmonization of laws and regulations. We will specifically advocate for harmonization of laws, regulations and system standards within the East African region so that we are strategically positioned to take advantage of cross-border electricity trading.</p>
<b>Objective 4</b>	<b>Increase technical, commercial and operational efficiency in electricity generation, transmission and distribution</b>
Description	<p>ERA will review and enforce the minimum performance standards related to quality of supply and quality of service for the industry.</p> <p>ERA will develop and enforce key performance indicators for the generation, transmission and distribution of electricity. Further, we will enforce compliance to laws, regulations and license conditions.</p> <p>ERA will enforce the development and implementation of optimal maintenance plans by electricity generators, transmitters and distributors. We will develop and implement incentive-based regulatory frameworks for Licensees. This will entail setting of appropriate performance targets to improve efficiency.</p> <p>ERA will undertake technical (i.e., engineering, financial, etc) audits of Licensees' activities to ensure value for money.</p>
<b>Objective 5</b>	<b>Promote reasonable and fair pricing of electricity services</b>
Description	ERA will establish a dynamic tariff structure that delivers reasonable and fair prices of electricity; investigate tariff charges and periodically review the financial performance of Licensees to inform the reasonableness of performance targets.

<b>Objective 6</b>	<b>Promote objectivity, transparency and accountability to stakeholders</b>
Description	<p>Good stakeholder communication, relations, awareness and collaborative arrangements will play a key role in successful implementation of this plan. ERA will develop and implement a comprehensive and effective Awareness and Advocacy Strategy, Stakeholder Communication Strategy and Stakeholder Engagement Framework. We shall sustain on-line presence through maintenance of our social media pages and timely update of the content on the ERA website. ERA will develop Stakeholder Consultation Guidelines, Annual Stakeholder Consultation Plans and Stakeholder Engagement tools.</p> <p>Consumer protection and awareness of rights and obligations is key. We will develop a consumer service framework comprising Complaints Handling Policy, Consumer Protection Policy and Contact Centre Management Strategy. We will develop a Service Charter which will set out the standard of service excellence expected from ERA when dealing with stakeholders.</p>
<b>Objective 7</b>	<b>Enhance good governance, internal operating efficiency and sustainability of ERA</b>
Description	<p>We shall improve and maintain a system of internal controls, ensure compliance with the applicable legislation and policy framework and maintain independent and effective governance structures. We will create a high performance culture and improve standardization by establishing internal service standards, maintaining a system for monitoring adherence to service levels and qualifying for ISO Certification.</p> <p>We shall continue to ensure financial viability and sustainability of ERA; endeavour to expand revenue sources to achieve adequate funding of our activities and continuously review control systems to cope with the dynamic risk environment.</p>
<b>Objective 8</b>	<b>Enhance human capital management</b>
Description	ERA will develop policies, systems and work methods that will provide an enabling environment that will attract, develop and retain skilled staff. We shall institute capacity development measures and implement effective talent management and succession planning measures. The performance management system will be continuously improved and we will strive to maintain a positive employee relations environment.
<b>Objective 9</b>	<b>Improve use of technology and promote optimal utilization of organizational assets</b>
Description	We will increase our investment in and awareness of technology with the aim of attaining greater operational efficiency and for proper planning, knowledge management and decision making. We shall institute a Regulatory Information Management System to facilitate more efficient regulatory processes and roll out E-Registry. We will improve website capabilities, introduce IT enhancements, develop and maintain sound organization infrastructure, namely buildings, furniture and fittings, motor vehicles and ICT infrastructure.

## 6.0 BALANCED SCORECARD AND RESOURCE REQUIREMENTS

### 6.1 Balanced Scorecard 2014/15 – 2023/24

Successful implementation of this Strategic Plan will result into four key outcomes, namely, enhanced security of electricity supply, improved industry efficiency, greater industry sustainability and operational excellence.

ERA's Balanced Scorecard is presented in Annex A. It comprises four strategic themes, nine strategic objectives, various initiatives, performance indicators and targets.


### 6.2 Budget Assumptions

The following assumptions underpin the budget for 2014/15 – 2023/24:-

1. Currently, license fees contribute 66% of the total revenues and have been projected to remain above 60% until 2018. After 2018, provision has been made for a generation levy increment of 0.7%, raising the final levy charge to 1% of the total distribution sales for Umeme Limited and UETCL.
2. License fees have been forecasted to contribute Ushs 7,953 million in the first year and will grow at a rate of 4% per annum.
3. Based on the current projects under development, a 33% increase in installed generation capacity is envisaged in the third year. Taking into account an average plant factor of 50 - 60%, this will translate into 16.5% increase in revenue from the generation levy.
4. An annual inflationary increment of 7% has been provided for all activities.
5. There will be an increased emphasis and focus on technical audits and monitoring and enforcement of regulatory compliance.
6. During this period, staff training will be given special attention in order to enhance technical and professional capacity. An increment of 7% per year has been provided on training expenditure.
7. With exception of personnel (7%) and monitoring and compliance (9%), the rest of the expenditure is forecasted to increase at a rate of 10% over the implementation period.

### 6.3 Resource Requirements

Successful implementation of this Strategic Plan will require both human and financial resources. Optimal level of staffing in numbers, skill and experience is key. Annex B presents the Organization Structure that will facilitate achievement of ERA's Vision during this period. Vacant positions in this structure will be filled during the first three years and the current staff will be retained. A comprehensive review of the Organization Structure will be undertaken in the fourth year.



The budget for the ten-year Strategy is Ushs 248,497 million. ERA intends to finance 99% of this through its operations while 1% (Ushs 3,625 million) will be financed outside ERA's budget through the tariff. Included in this budget is a total of Ushs 10,000 million for acquisition of new office premises. This expenditure is projected to commence in 2015/2016. The ten-year revenue and expenditure forecast is shown in Table 9.

ERA will commit all its efforts to ensure that the projected revenues are realized. However, in the event that these revenue projections are not realized, the Authority may approach the Minister of Energy and Mineral Development for additional funding through the tariff. Further to this, prioritization of activities will be considered so that only key result areas are given precedence.

## 6.4 Notes to the Revenue and Expenditure Forecast

- i) Revenue from the generation levy is projected to increase progressively as new generation plants are commissioned. During the financial year 2018/2019, the levy is projected to increase significantly on account of the anticipated revision of the generation levy to 1%.
- ii) The second review of the performance parameters of Umeme Limited and third review of performance parameters of Eskom (U) Limited will be undertaken during the financial year 2017/18. These activities involve extensive studies by independent consultants. As such, significant increase in both consultancy and compliance and monitoring expenditure is envisaged.
- iii) A budget of UShs 12,462m was approved for the period 2014/15. This includes Ushs 500m that will be funded outside ERA's budget and obtained through the tariff. An additional Ushs 2,625m will be obtained through the tariff during the year, bringing the total financing from the tariff to Ushs 3,125m. The additional funds from the tariff will be utilized for:-
  - a. Consultancy services worth Ushs 800m for determination of optimal investment requirements in the distribution network;
  - b. Consultancy services worth Ushs 700m for review and investigation of tariff charges and updating of the tariff models and structures;
  - c. Cost of service study estimated at Ushs 500m; and,
  - d. Wheeling and interconnection framework study estimated at Ushs 625m.
- iv) Ushs 500m will be obtained from the electricity industry in 2015/16, outside ERA's budget, to finance the competitive reverse tender project for renewable energy.
- v) Ushs 500m has been earmarked in 2015/16 to commence the process of acquisition of adequate office premises. The total cost of this project will be spread from the second year to the end of the strategy period.
- vi) ERA has been at the forefront of least cost generation planning, which involves comprehensive forecasting of sector costs and determination of the tariff path to support the generation plan. In this plan, detailed analysis is made to justify the need



for new projects coming online, in light of the demand forecast for the electricity supply industry. From the generation plan, it is evident that by harnessing the development of renewable sources of energy, financial sustainability of the organization will be attained from the year 2016/17 onwards.

**Table 9: Ten-Year Revenue and Expenditure Forecast**

REVENUE & EXPENDITURE FORECAST												
	Actual		Projected									
	2012/2013	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
			BL (Y1)	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
	UShs, M	UShs, M	UShs, M	UShs, M	UShs, M	UShs, M	UShs, M	UShs, M	UShs, M	UShs, M	UShs, M	UShs, M
Generation Levy Revenue	2,781	2,858	3,481	3,509	3,876	4,766	16,497	17,265	19,005	20,919	23,028	25,349
License fees	5,647	5,209	7,953	8,203	8,503	9,353	10,007	10,107	10,613	11,143	11,478	11,707
Application fees	209	464	320	352	422	452	484	517	554	592	634	678
Wire Permits	80	89	100	110	132	141	151	162	173	185	198	212
Rental Incomes	48	48	48	48	60	60	60	60	64	64	64	64
Sector Contribution	-		3,125	500								
Interest Revenue	11	18	60	70	80	86	92	98	105	112	120	128
<b>Total Revenue</b>	<b>8,776</b>	<b>8,687</b>	<b>15,087*</b>	<b>12,791</b>	<b>13,073</b>	<b>14,858</b>	<b>27,291**</b>	<b>28,210</b>	<b>30,513</b>	<b>33,017</b>	<b>35,522</b>	<b>38,139</b>
<b>Expenditure</b>												
Current Expenditure												
Personnel/Staff	4,526	5,463	6,594	6,651	7,116	7,637	8,371	9,557	10,226	10,942	11,708	12,527
Authority	740	728	893	983	1,051	1,125	1,204	1,288	1,378	2,067	2,212	2,367
Stakeholder	684	877	1,150	1,231	1,317	1,409	1,707	2,227	2,383	4,289	4,589	4,911
General Administration	803	838	949	1,016	1,007	1,077	1,553	1,861	1,992	2,808	3,005	3,215
Training and Conferences	742	775	865	865	926	1,019	1,590	2,201	2,355	4,240	4,536	4,854
Consultancies	710	421	1,799	599	640	685	1,283	1,873	2,004	2,405	2,573	2,754
Monitoring and Compliance	77	197	2,427	502	532	569	1,651	2,267	2,463	4,927	5,272	5,641
<b>Total Current Expenditure</b>	<b>8,282</b>	<b>9,299</b>	<b>14,677</b>	<b>11,846</b>	<b>12,590</b>	<b>13,521</b>	<b>17,359</b>	<b>21,274</b>	<b>22,802</b>	<b>31,678</b>	<b>33,895</b>	<b>36,268</b>
<b>Non Current Expenditure</b>												
Capital Costs	489	244	406	410	410	1,259	9,847	6,846	7,615	1,146	1,420	1,651
<b>Total Non Current Expenditure</b>	<b>489</b>	<b>244</b>	<b>406</b>	<b>946</b>	<b>483</b>	<b>1,338</b>	<b>9,931</b>	<b>6,936</b>	<b>7,712</b>	<b>1,339</b>	<b>1,626</b>	<b>1,872</b>
<b>Total Budget Expenditure</b>	<b>8,771</b>	<b>9,544</b>	<b>15,083</b>	<b>12,792</b>	<b>13,073</b>	<b>14,858</b>	<b>27,290</b>	<b>28,210</b>	<b>30,514</b>	<b>33,017</b>	<b>35,521</b>	<b>38,140</b>
Budget Reserve/Surplus	5	(857)	4	(0)	0	(0)	0	(0)	(0)	(0)	0	(0)

\* Total revenue for the year 2014/15 includes an additional Ushs 3,125 million which will be obtained from the tariff outside ERA's budget.

\*\* The increase in revenue from Ushs 14,858 million in 2017/18 to Ushs 27,291 million in 2018/19 is on account of the anticipated revision of the generation levy from 0.3% to 1%.

## 7.0 MONITORING AND EVALUATION

### 7.1 Objectives of Monitoring and Evaluation

The monitoring and evaluation framework aims to achieve the following:-

- Track the realization of outcomes from the defined strategies and initiatives over the strategic planning period;
- Ascertain whether resources earmarked for the implementation of the initiatives suffice and are delivering the desired outcomes;
- Assess whether the expected outcomes from the strategies are being realized from the implementation process;
- Establish whether there are any un-anticipated challenges that might have cropped up and seek ways of how best to address them; and,
- Ascertain whether the institutional capacity in terms of facilities, logistics, human resources and financial resources are adequate to enable realization of the Vision, Mission and objectives.

### 7.2 Monitoring and Evaluation Framework

The implementation of this Strategy will be monitored and evaluated using the Balanced Scorecard Matrix presented in Annex A. Through this Strategy, ERA will focus on results-based monitoring and evaluation. In order to make this Strategic Plan a 'living' document that informs ERA's operations, a clear connection has been established with the three-year Business Plan. This framework will trickle down to Annual Institutional, Departmental and individual Work Plans. This will also be linked to the performance management system. Management will ensure that continuous monitoring and evaluation activities and processes are undertaken.

The routines for monitoring strategy implementation shall include monthly, quarterly and annual review meetings. Reports shall be produced at the end of each review with recommendations to inform Management's action. A comprehensive mid-term review of the Strategic Plan will be undertaken, taking into account internal and external factors and assumptions.

### 7.3 Critical Success Factors

The interventions below are a prerequisite for successful implementation of the Strategic Plan:-

- a) Strategic leadership;
- b) Training and capacity building of ERA staff;
- c) Regular monitoring and evaluation of the Strategic and Business Plans;
- d) Effective control of ERA's expenditure through, among other things, reduction and/or elimination of resource wastage;
- e) Adherence to internal standard operating procedures and work processes; and,
- f) Effective stakeholder engagement.

# ANNEX A: ERA BALANCED SCORECARD

## THEME A:

## POWER SUPPLY SECURITY AND SUSTAINABILITY OF THE ESI

### STRATEGIC OBJECTIVE A1: INCREASE ELECTRICITY GENERATION TO MEET PRESENT AND FUTURE DEMAND THROUGH ATTRACTION OF BOTH PRIVATE AND PUBLIC SECTOR INVESTMENT AND INTEGRATION OF ENVIRONMENTAL CONCERNS

Strategic Initiative	Performance Indicator	Target
1. Develop policies that promote sustainable energy development (e.g. Interconnection Policies, Wheeling Framework, competitive procurement process for generation projects, transparent licensing regime)	a) Increase in generation capacity (%)	BL= 0 Y3= 33 Y7= 95 Y10= 160
2. Review and update relevant legal framework (Renewable Energy Policy, 2002, REFIT Policy, standardized agreements and Licenses)	b) Proportion of renewable energy in the generation mix (%)	BL= 88 Y3= 97 Y7= 100 Y10= 100
3. Develop and maintain a dynamic Least-Cost Generation Plan to guide investment in electricity generation	a) Supply equals demand plus 10% reserve margin	BL= 0 Y3= 0 Y7= 0 Y10= 0
	b) % reduction in the real cost of generation	BL= 0 Y3= 2 Y7= 5 Y10= 9
4. Integrate environmental and social concerns into all regulatory activities	% of licensed projects with environmental clearance	BL= 100% Y3= 100% Y7= 100% Y10= 100%

## STRATEGIC OBJECTIVE A2: PROMOTE ENERGY EFFICIENCY AND DEMAND SIDE MANAGEMENT PRACTICES

Strategic Initiative	Performance Indicator	Target
1. Develop a Demand Side Management Plan and facilitate implementation of Demand Side Management measures by distribution utilities	a) Improvement in the load factor (%)	BL= 70% Y3= 75% Y7= 78% Y10= 80%
2. Collaborate with the relevant authorities to advocate for enactment of laws that will incentivize consumers to implement energy efficient measures	b) % of energy saved through DSM and EE measures	BL= 0% Y3=5% Y7= 7% Y10= 8%
3. Develop an incentive program for large electricity users to exploit time-of-use tariff regime		

## STRATEGIC OBJECTIVE A3: STRENGTHEN THE NATIONAL ELECTRICITY TRANSMISSION AND DISTRIBUTION INFRASTRUCTURE AND ENHANCE REGIONAL COLLABORATION IN ELECTRICITY REGULATION

Strategic Initiative	Performance Indicator	Target
1. Develop uniform industry standards for electrical infrastructure	% availability of the network (transmission and distribution)	(Tx; Dx) BL= 98; 65 Y3= 98.5; 75 Y7=99; 80 Y10=99; 80
2. Coordinate industry-wide network planning and development	a) Transmission and distribution line length (km)	(Tx; Dx) BL= 1,627; 26,202 Y3=3,566; 57,056 Y7=4,971; 79,536 Y10=4,971; 95,443
	b) Increased transmission and distribution transformation capacity(MVA)	(Tx; Dx) BL= 940; 2,168 Y3= 3,520; 3,520 Y7= 3,640; 3,640 Y10=4,140; 4,140
	c) % increase in national electricity connection rate	BL= 0 Y3=52 Y7=166 Y10=300

**THEME B:****ELECTRICITY INDUSTRY EFFICIENCY****STRATEGIC OBJECTIVE B1: INCREASE TECHNICAL, COMMERCIAL AND OPERATIONAL EFFICIENCY IN ELECTRICITY GENERATION, TRANSMISSION AND DISTRIBUTION**

Strategic Initiative	Performance Indicator	Target
1. Develop and enforce minimum performance standards for quality of supply and quality of service	a) Level of quality of supply (100%)	(Gx; Tx; Dx) BL= 100;100;50 Y3= 100;100;70 Y7=100;100;80 Y10=100;100;100
	b) Level of quality of service (%)	BL= 50 Y3= 70 Y7= 80 Y10=90
2. Develop and enforce performance standards for the generation, transmission and distribution of electricity	Improvement in operational efficiency	BL= 95 Y3= 97
3. Undertake technical (i.e., engineering, financial, etc) audits of Licensees' activities to ensure value for money	a) Target availability for generation (%)	Y7=97 Y10=97
	b) Transmission and distribution losses (%)	BL= 3.8; 20 Y3= 3.3; 14.7 Y7=3.0; 10 Y10=2.8; 8
	c) Reduction in operating costs per unit output (%)	BL= 0 Y3= 5 Y7=8 Y10=10
4. Develop and enforce the preparation and implementation of optimal maintenance plans by electricity generators, transmitters and distributors	Improvement in system availability	SAIDI; SAIFI; CAIDI
	a) SAIDI	BL= 257; 109; 2.4
	b) SAIFI	Y3= 100 ; 50; 2.0
	c) CAIDI	Y7= 50; 30; 1.7 Y10=30; 20; 1.5



## STRATEGIC OBJECTIVE B2: PROMOTE REASONABLE AND FAIR PRICING OF ELECTRICITY SERVICES

Strategic Initiative	Performance Indicator	Target
1. Establish a dynamic tariff structure that delivers reasonable and fair prices of electricity	Level of cost reflectiveness of the tariffs (%)	BL= 81.4 Y3= 81.4 Y7= 100 Y10= 100
2. Develop and enforce regulatory accounting guidelines for Licensees	Level of compliance to accounting guidelines (%)	BL= 0 Y3= 100 Y7=100 Y10=100

## THEME C: TRANSPARENCY AND ACCOUNTABILITY TO STAKEHOLDERS

### STRATEGIC OBJECTIVE C1: PROMOTE OBJECTIVITY, TRANSPARENCY AND ACCOUNTABILITY TO STAKEHOLDERS

Strategic Initiative	Performance Indicator	Target
1. Develop and implement a Stakeholder Engagement Framework, Awareness and Advocacy Strategy	a) Stakeholder Awareness Index	BL=50 Y3=70 Y7=80 Y10=95
2. Develop and implement a Stakeholder Communication Strategy	b) Level of stakeholder participation in ERA activities	BL=70 Y3=80 Y7=85 Y10=95
3. Promote electricity consumer protection	Consumer satisfaction index	BL=70 Y3=75 Y7=80 Y10=95

**THEME D:****OPERATIONAL EXCELLENCE****STRATEGIC OBJECTIVE D1: ENHANCE GOOD GOVERNANCE, INTERNAL OPERATING EFFICIENCY AND SUSTAINABILITY OF ERA**

Strategic Initiative	Performance Indicator	Target
1. Review, maintain and implement a system of internal controls and risk management	Level of compliance to internal controls (%)	BL=70 Y3= 100% Y7= 100% Y10=100%
2. Ensure financial viability and sustainability of ERA	a) Balanced budget b) % increase in ERA's revenue portfolio	BL=0 Y3= 31% Y7 =185% Y10=260%

**STRATEGIC OBJECTIVE D2: ENHANCE HUMAN CAPITAL MANAGEMENT**

Strategic Initiative	Performance Indicator	Target
1. Develop policies, systems and work methods that will provide an enabling environment that will attract, develop and retain skilled staff	a) Percentage of organisation structure that is filled	BL=75 Y3=90 Y7=100 Y10=100
	b) Staff retention rate	BL=90 Y3=95 Y7=95 Y10=95
	c) Employee satisfaction index (%)	BL=80 Y3=85 Y7=90 Y10=95

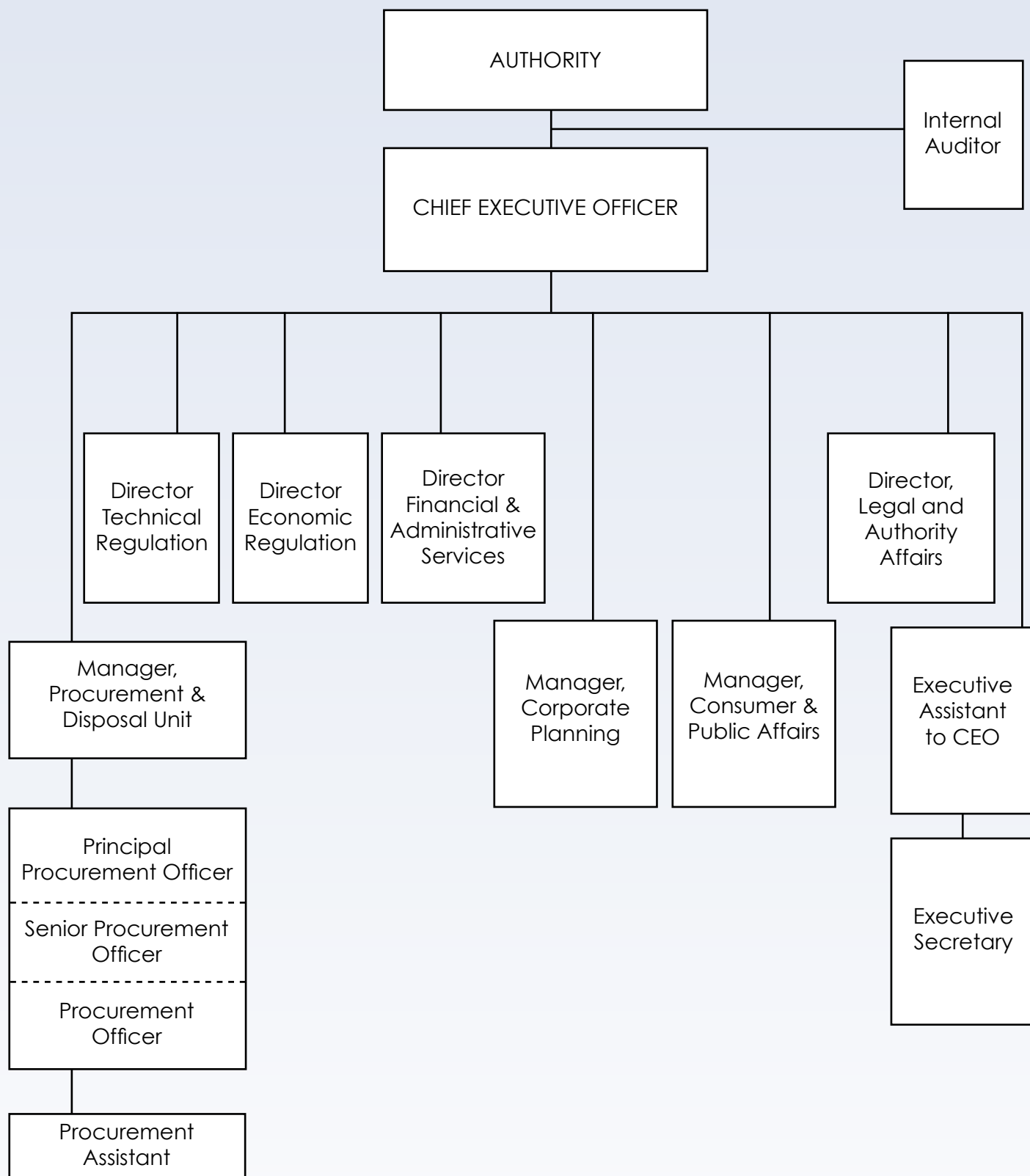


Strategic Initiative	Performance Indicator	Target
2. Develop and implement staff development plan in order to improve knowledge, skills and abilities	a) Level of employee and organizational performance (%)	BL=70 Y3=80 Y7=90 Y10=95
	b) % of positions filled internally	BL=80 Y3=90 Y7=90 Y10=90
	c) Compliance to staff development plan (%)	BL=70 Y3=80 Y7=90 Y10=90
3. Review, implement and continuously improve the performance management system	a) % improvement in staff performance	BL=70 Y3=80 Y7=90 Y10=95
	b) % improvement in institutional performance	BL=70 Y3=80 Y7=90 Y10=95
4. Promote knowledge sharing within ERA by implementing a knowledge management programme	Knowledge sharing index	BL= 70% Y3= 80% Y7= 90% Y10=90%

### STRATEGIC OBJECTIVE D3: IMPROVE USE OF TECHNOLOGY AND PROMOTE OPTIMAL UTILIZATION OF ORGANIZATIONAL ASSETS

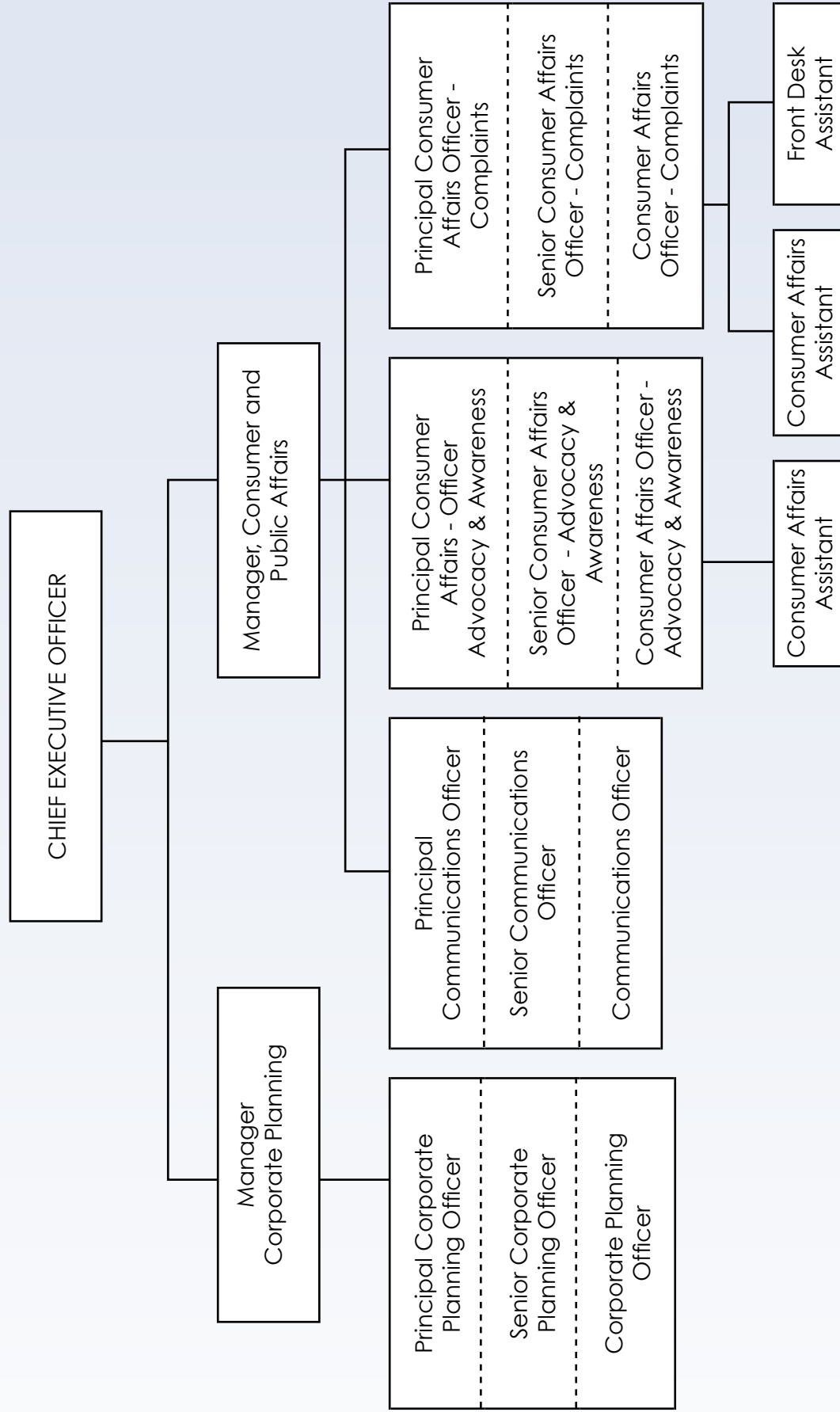
Strategic Initiative	Performance Indicator	Target
1. Establish and maintain fully automated and integrated systems	Level of system automation (%)	BL= 60 Y3= 100 Y7= 100 Y10= 100
2. Maintain an up-to-date sector statistical database and provide accurate up to date and relevant information resources	User satisfaction index	BL= 50% Y3= 100% Y7= 100% Y10= 100%
3. Acquire and maintain a reliable, highly available and scalable computing and communication infrastructure	% of targeted upgrades implemented	BL= 60 Y3= 100 Y7= 100 Y10= 100
4. Acquire and maintain physical infrastructure for the organization	Adequacy of infrastructure (%)	BL= 90 Y3= 100 Y7= 100 Y10=100

## ANNEX B: ORGANIZATION STRUCTURE

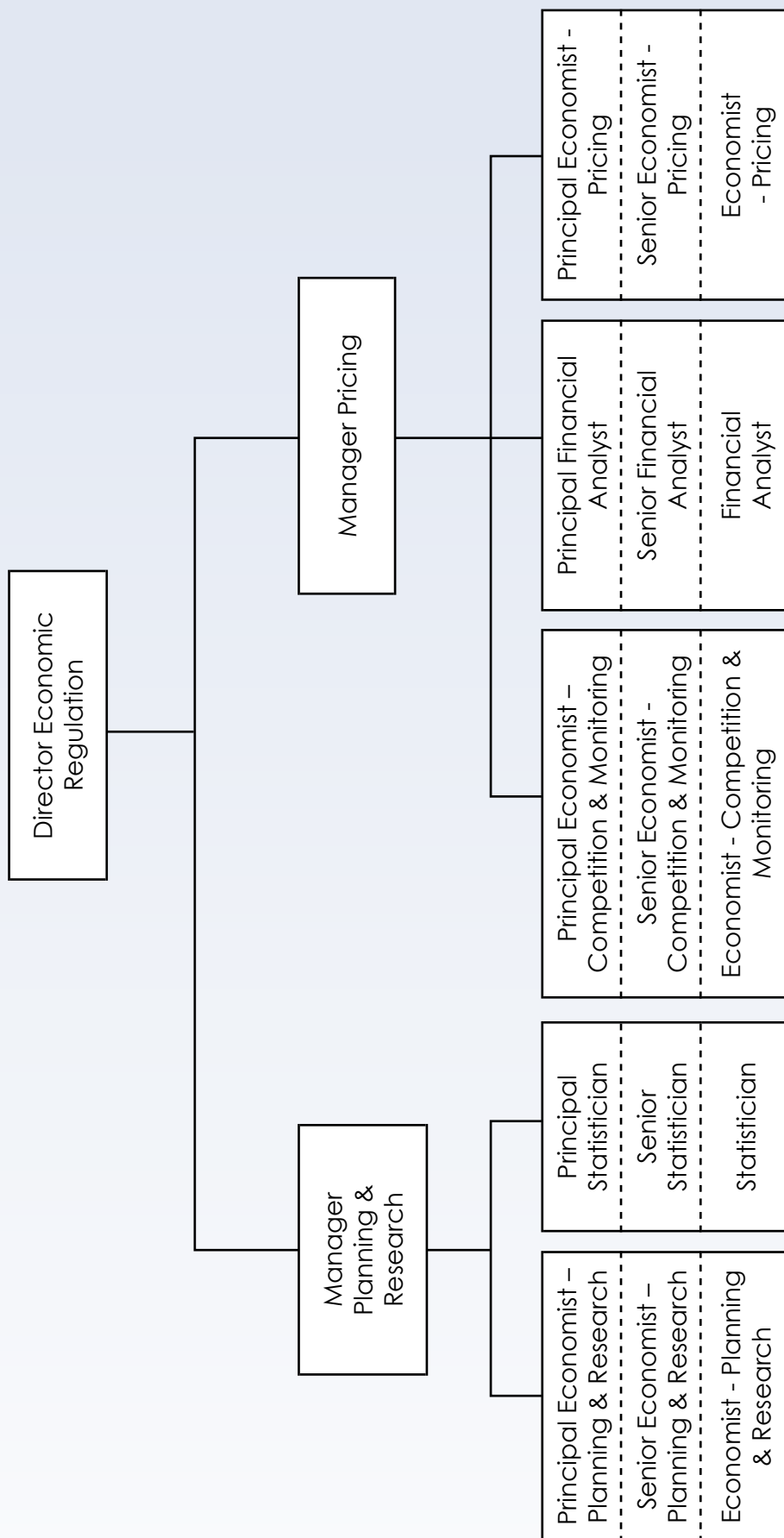




## SECTION OF CORPORATE PLANNING, CONSUMER AND PUBLIC AFFAIRS

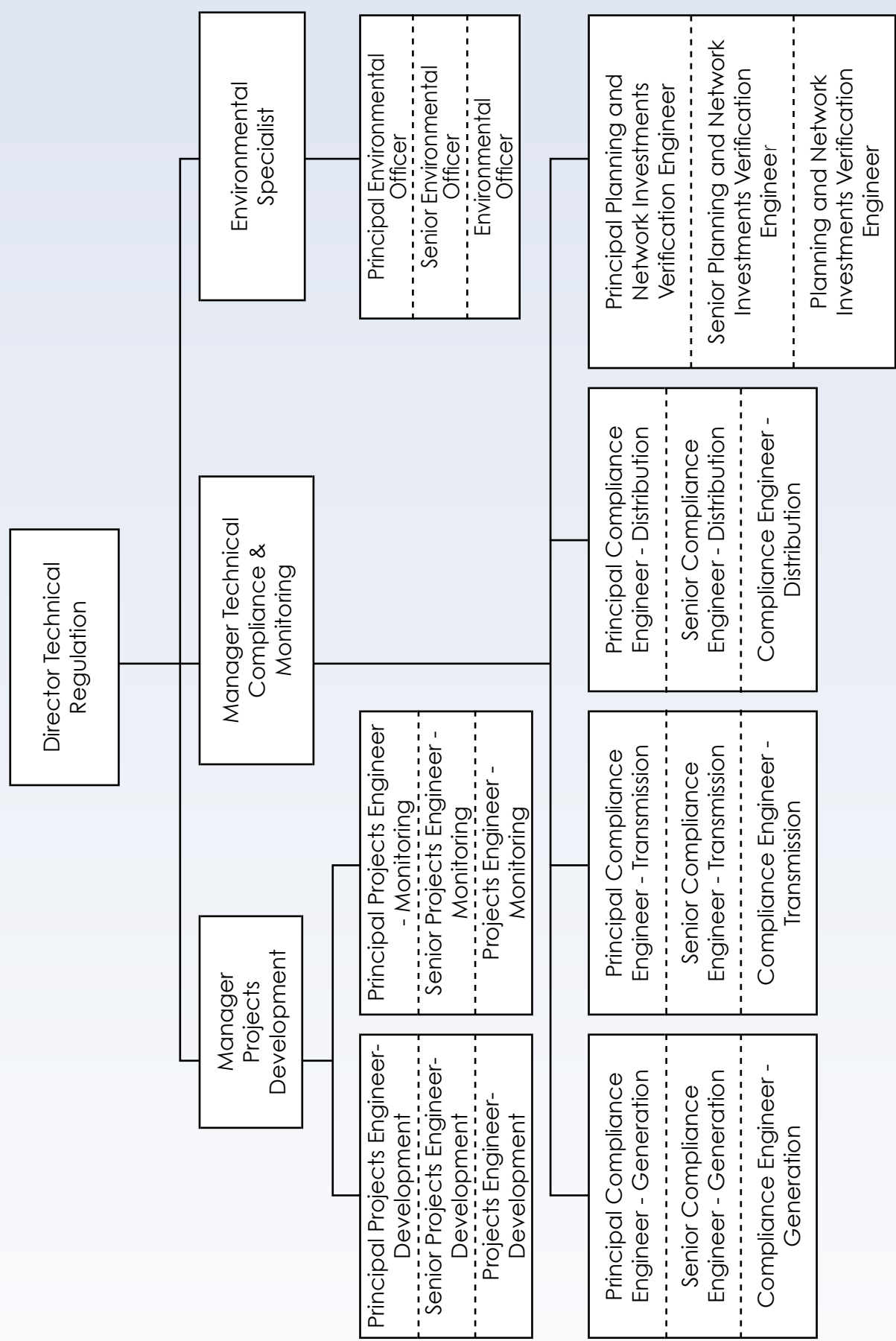


## DIRECTORATE OF ECONOMIC REGULATION

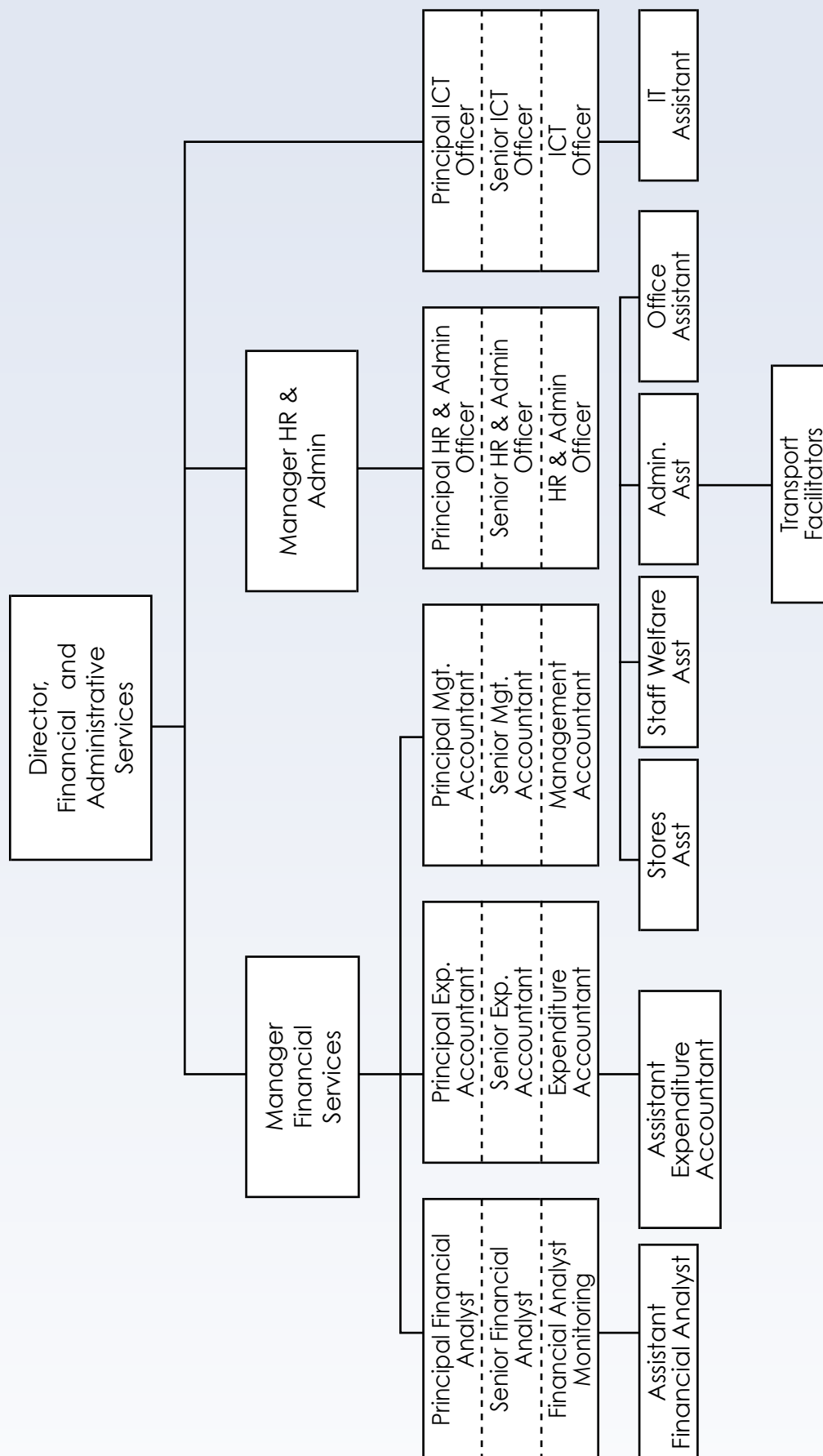




# DIRECTORATE OF TECHNICAL REGULATION

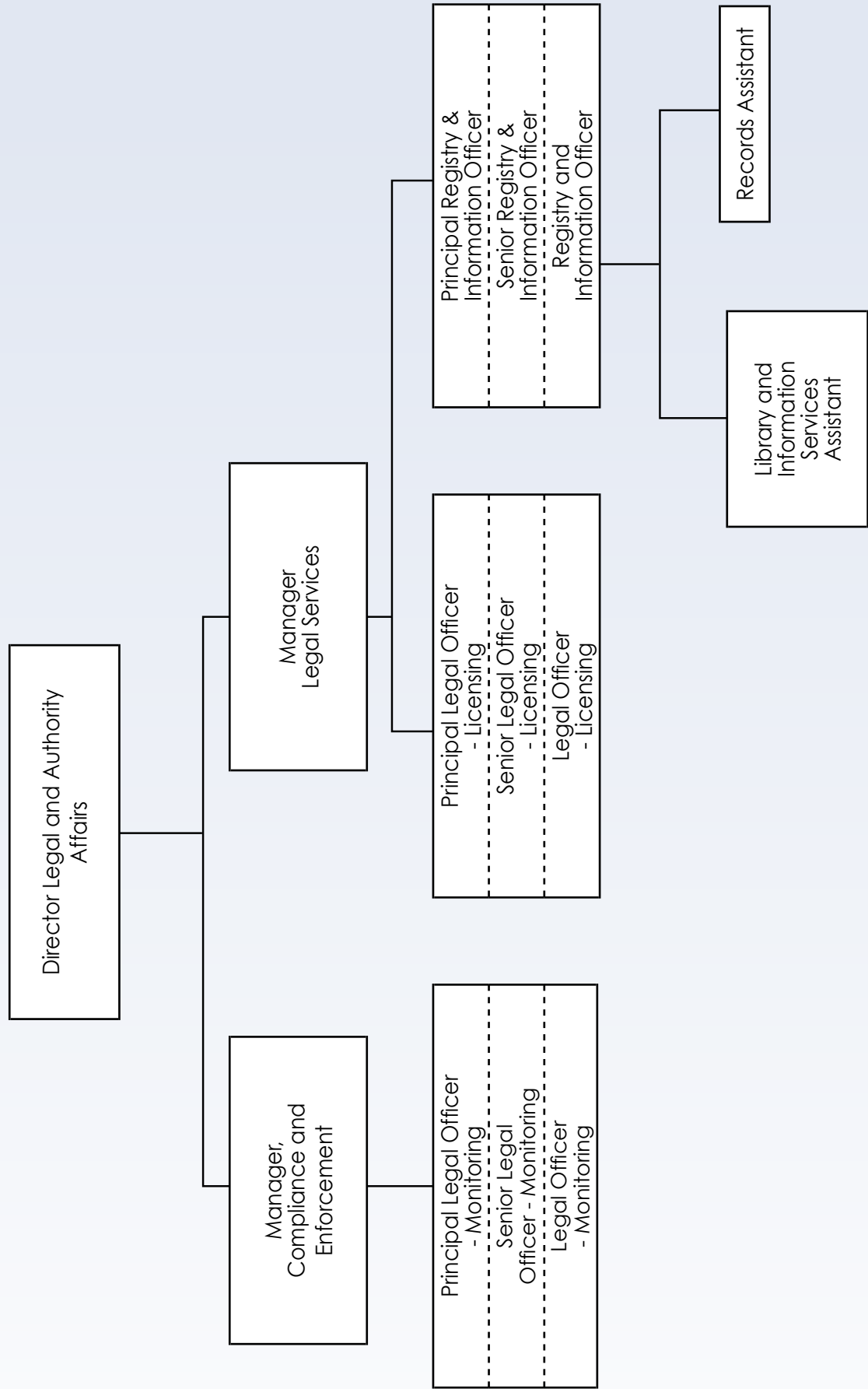


## DIRECTORATE OF FINANCIAL AND ADMINISTRATIVE SERVICES





## DIRECTORATE OF LEGAL AND AUTHORITY AFFAIRS









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